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ABSTRACT

This guide provides a review of the characteristics of children with fetal alcohol syndrome (FAS) or possible prenatal alcohol-related effects (PPAE) and describes specific intervention strategies. Section 1 offers a general review of the diagnostic procedures, the prevalence of FAS and the physical, educational, and behavioral characteristics of FAS and PPAE. The characteristic specific cluster of physical anomalies associated with FAS is detailed and characteristics are listed by type (physical, attention and hyperactivity, speech/language, socialization, cognition) for three age groups: birth to 6 years, 7 to 12 years, and 13 to 18 years. Section 2 describes specific strategies to enhance the educational, social, behavioral, and psychological development of students with FAS and PPAE. This section also explains strategies for developing self-management skills and strategies for coordinating services with other agencies. Emphasis is on a multidisciplinary team approach, with parents as integral members, and on the importance of the teacher-student relationship. Section 3 provides an annotated listing of 21 teaching resources. Section 4 lists publishers' addresses. (Contains 34 references.)

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TEACHING STUDENTS WITH

Fetal Alcohol Syndrome & Possible Prenatal Alcohol-related Effects

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This Resource Includes

- A review of the physical, educational and behavioural characteristics
- A description of specific strategies
- An annotated list of resources

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Introduction

The potentially negative effect of alcohol abuse during pregnancy has been suspected since biblical times. Fetal alcohol syndrome (FAS) was first formulated as a syndrome in 1973, when Kenneth Jones and colleagues (Giunta & Streissguth, 1988, p. 453) presented cases outlining the alcohol-related birth defects of 11 children. Less than 25 years later, alcohol-related birth defects have become known as one of the leading causes of mental retardation and one of the three leading causes of birth defects (Davis, 1994, p. 3). Unlike spina bifida and Down's syndrome, the other two leading causes of birth defects, alcohol-related birth defects are among the few causes of mental retardation that are 100 per cent preventable (McCuen, 1994, p. 36). A child who has been prenatally exposed to alcohol is at risk for developmental, behavioural, psychological, social and learning problems. The effects of the exposure vary and range along a continuum of impairment from minimal symptoms to severe impairment in all areas of the child's development. The medical, educational and social systems have struggled and continue to struggle to understand the effects and the impact that such effects have on these children, their families and their communities.

This resource provides educators with a basic understanding of the characteristics associated with fetal alcohol syndrome and possible prenatal alcohol-related effects (PPAE), and the issues and strategies relevant to the education of students with the syndromes. Until recently, the term "fetal alcohol effects" (FAE) was used to indicate that an individual had some, but not all of the characteristic features of FAS. Currently, researchers discourage the use of the term "fetal alcohol effects" because of the confusion and clinical problems it creates (Stratton, Howe & Battaglia, 1996). Throughout this resource, the term "possible prenatal alcohol-related effects" will be used instead. "Fetal alcohol effects" is only used when directly citing research findings from the literature.

As is the case with any disability, individuals with fetal alcohol syndrome display a range of disabilities and support needs. Each student is a unique individual and each student's individual strengths, interests, needs and level of impairment must be considered when designing the student's individualized program plan. For more information on individualized program plans (IPPs), see *Individualized Program Plans*, Book 3 in the *Programming for Students with Special Needs* series (see pages FAS.53–54 for ordering information). Flexibility to adapt to individual needs is of paramount importance.

Although this resource is primarily about students with fetal alcohol syndrome, the strategies are based on the individual educational needs of students, not their diagnoses. Many students with fetal alcohol syndrome present characteristics and learning needs similar to students with attention-deficit/hyperactivity disorder, learning disabilities and developmental delays. This resource is based on a review of the literature specific to children with fetal alcohol syndrome, as well as the application of principles of education which are often applicable to many students. Many of the techniques are similar to those present in any good education program but because students with FAS/PPAE are more vulnerable, these techniques are essential for them. Effective teachers select strategies based on their knowledge of the individual student, what the student can do and what knowledge, skills and attitudes the student should learn next. The educational growth of a student is best accomplished through the mutual efforts of, and close communication among, the student, the family, the school, the community and other professionals involved with the student.

This resource is organized into three main sections:

- a general review of the diagnostic procedures, the prevalence of the syndromes, and the physical, educational and behavioural characteristics of fetal alcohol syndrome and possible prenatal alcohol-related effects
- a description of specific strategies to enhance the educational, social, behavioural and psychological development of students with fetal alcohol syndrome and possible prenatal alcohol-related effects
- an annotated list of resources useful for teachers in promoting student learning.

Fetal alcohol syndrome (FAS) is one type of a medical condition describing a specific cluster of abnormalities observed in children born to women with a history of alcohol consumption during pregnancy. Possible prenatal alcohol-related effects (PPAE) is another type. It is important for educators to recognize the symptoms and associated characteristics of both fetal alcohol syndrome and possible prenatal alcohol-related effects to determine intervention strategies to assist in meeting the special needs of these students.

Identifying Characteristics of Fetal Alcohol Syndrome

Fetal alcohol syndrome is a medical diagnosis. To be valid, the diagnosis must be made by a physician specifically trained to recognize birth defects.

Burgess & Streissguth state that currently, there are no standardized psychological or behavioural tools that can be used to make this diagnosis, although such tests can be used to corroborate medical opinion. To be diagnosed with fetal alcohol syndrome, a child must have:

- a specific cluster of physical anomalies
- growth deficiencies
- central nervous system problems
- a history of prenatal exposure.[1]

The diagnosis is usually made from a physical examination, supplemented with information about prenatal exposures, the birth record and the medical history. According to Stratton et al., FAS diagnosis has recently been divided into three categories:

- Category 1, FAS — anomalies found in facial features, brain and growth, and confirmed maternal alcohol exposure
- Category 2, FAS without confirmed maternal alcohol exposure — all the clear features necessary for a FAS diagnosis but without a confirmed history of alcohol exposure
- Category 3, partial FAS with confirmed maternal alcohol exposure — confirmed exposure to substantial amounts of alcohol, some components of the pattern of characteristic facial anomalies and either evidence of growth retardation, central nervous system problems, or complex patterns of behaviour or cognitive abnormalities.[2]

"Fetal alcohol syndrome and fetal alcohol effects: principles for educators" by D. M. s & A. P. Streissguth. Reprinted with permission.

Fetal alcohol syndrome: diagnosis, epidemiology, prevention, and treatment by K. R. n, C. J. Howe & F. C. Battaglia. Reprinted with permission.

Some of the hallmark indicators in infancy, such as abnormal facial features, may become less distinct as the child grows toward adulthood. This is particularly true of Category 3 cases. Streissguth, LaDue & Randels identify the following characteristics which are noted when making a diagnosis.

Specific Cluster of Physical Anomalies

Facial Features

- narrow eye width, drooping eye lid (ptosis)
- thin upper lip
- short up-turned nose
- general under development of mid-facial area (hypoplasia) resulting in a flattened facial appearance
- under development of the groove between the base of the nose to the top of the upper lip

Skeletal Abnormalities

- curvature of the spine (scoliosis)
- indentation of the chest (pectus excuvatum)
- congenital hip dislocation
- limited movement of the fingers, elbows and wrists
- altered palm crease patterns
- small nails on hands and/or toes, short fifth finger
- birthmarks (hemangima)
- dental abnormalities of secondary teeth
- heart problems in about 33 per cent of younger children
- increased frequency of major malformations such as cleft palate, enlarged head (hydrocephalus), spina bifida (meningomyelocele)
- increased frequency of vision and hearing problems

Growth Deficiencies

- usually fall between the third percentile and tenth percentile for weight and/or length at birth
- continue to be short and thin in relation to peers

Central Nervous System Problems

- narrow head circumference (microcephaly), often associated with developmental disabilities
- 50 per cent have cognitive impairment; 30 per cent have borderline cognitive delays[3]

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[3] From *A Manual on adolescents and adults with fetal alcohol syndrome with special reference to American Indians* by A. P. Streissguth, R. A. LaDue & S. P. Randels. Material reprinted with permission.

- many have brain damage and have specific areas of strengths and weaknesses, similar to people who have sustained brain injuries from auto accidents (McCuen, 1994, p. 35)
- behaviour problems often result from the brain damage because of differences in the manner in which information is processed (McCuen, 1994, p. 35)

History of Prenatal Exposures [4]

- biological history from birth mother supplemented with information from secondary sources
- includes alcohol intake from all sources; e.g., cough syrup
- severity generally related to the level of exposure, but not all infants are uniformly affected
- cessation of drinking during third trimester may decrease effects on growth.

Identifying Characteristics of Possible Prenatal Alcohol-related Effects

A child with a history of prenatal alcohol exposure but without all the physical or behavioural symptoms of FAS may be categorized as having possible prenatal alcohol-related effects. A history of confirmed maternal alcohol exposure is required for this diagnosis. The Institute of Medicine divides this category into two:

- alcohol-related birth defect (ARBD) refers to physical anomalies or effects
- alcohol-related neurodevelopmental disorder (ARND) refers to neurodevelopmental problems such as behavioural problems.[5]

The term "fetal alcohol effects" has been used to indicate a milder form of FAS. However, Streissguth (1988), cited in Huebert & Raftis, states that the behavioural and functional impairments often associated with fetal alcohol effects (now known as possible prenatal alcohol-related effects) can have long-term social consequences, just as severe as those associated with FAS. These children have some, but not enough physical characteristics to warrant a diagnosis of fetal alcohol syndrome.[6] The IQ is higher, often within normal ranges. The damage suffered is neurological and is frequently expressed as hyperactivity, behavioural problems, learning disabilities and a general inability to function in social settings. These children may not be diagnosed in infancy because the physical abnormalities are fewer and

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[4] From *A Manual on adolescents and adults with fetal alcohol syndrome with special reference to American Indians* by A. P. Streissguth, R. A. LaDue & S. P. Randels. Material reprinted with permission.

[5] From *Fetal alcohol syndrome: diagnosis, epidemiology, prevention, and treatment* by K. R. Stratton, C. J. Howe & F. C. Battaglia. Reprinted with permission.

[6] From *Fetal alcohol syndrome and other alcohol-related birth defects* by K. Huebert & C. Raftis. Reprinted with permission.

less pronounced. As a result, they may not receive early intervention or assistance related to their learning disabilities.

Standardized psychological and behavioural tools can assist in supporting a diagnosis. Studies by Streissguth, cited in Burgess & Streissguth, have demonstrated the average IQ of students with FAS to be approximately 65 to 70, although the number may range from 30 to 105. The IQ range for PPAE is estimated to be almost the same, with an average slightly higher than that for FAS. The implication of these findings is that a student with FAS or PPAE may be found in all types of education programs and may fall anywhere along the range from normally skilled to severely disabled. FAS and PPAE are concerns for both regular and special educators. Students with PPAE often perform much higher on IQ testing than on measures which assess skills they are able to demonstrate in social and educational contexts.[7] Schroeder states that it is not known why their IQ tests are generally higher than the actual living-skills age, but it does emphasize the importance of using a variety of assessment strategies to get a true picture of the student as a whole when designing an intervention program.[8]

There is no specific treatment for fetal alcohol syndrome or possible prenatal alcohol-related effects. The effects are permanent, but a diagnosis of FAS or PPAE is often a welcome relief to parents and children because it offers an explanation for the academic and social difficulties that these children experience in school and at home. There is always a danger when labelling a child that the focus will be on the label and the individual needs of the child will be lost, or the strengths and talents of the child will be ignored. Diagnosing a child with fetal alcohol syndrome or possible prenatal alcohol-related effects can, however, serve as a catalyst for those involved with the child to seek additional information to assist in understanding how to support the learning needs. The diagnosis frees the child with FAS/PPAE of unrealistic expectations and encourages others to adjust to the child's abilities, and focus on his or her strengths and on maximizing the potential of the child.

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[7] From "Fetal alcohol syndrome and fetal alcohol effects: principles for educators" by D. M. Burgess & A. P. Streissguth. Reprinted with permission.

[8] From *An Overview of fetal alcohol syndrome and fetal alcohol effects* by C. A. Schroeder. Reprinted with permission of Dr. Cheryl A. Schroeder, Creative Consultants, Inc.

Prevalence of Fetal Alcohol Syndrome/ Possible Prenatal Alcohol-related Effects

Abel & Sokol (1991), cited in Huebert & Raftis, state that estimates of the incidence of FAS/PPAE may be conservative. The estimates are complicated by the difficulty in making the diagnosis, postnatal environments and cultural factors. The most frequently cited estimate of FAS among the general population in the western world is 0.33 per 1000 (or one per 3000) live births. This estimate is likely conservative as it reflects only those individuals who have actually been identified, referred and diagnosed. There is no known incidence rate of FAS in Canada primarily due to diagnostic difficulties. Incidence rates in some communities may be much higher — as high as one in every 100 births in regions where there is a high incidence of alcoholism. Incidence rates of possible prenatal alcohol-related effects are estimated at two to three times that of fetal alcohol syndrome.[9]

In the absence of a confirmed diagnosis, it remains imperative for educators to address the presenting educational and behavioural needs of students. The strategies provided in this resource are strong educational supports intended to enhance programming for many students with learning needs common to those with fetal alcohol syndrome and possible prenatal alcohol-related effects.

Physical, Educational and Behavioural Characteristics

Students with FAS and PPAE share common educational and behavioural profiles. For both FAS and PPAE, there is a continuum of effects on physical development and learning that depends on the amount of alcohol consumed, the timing of the drinking, and other metabolic and genetic factors.[10] The collective term "FAS/PPAE" is often used because the learning and behavioural disabilities that are of concern to teachers are common to both. The effects range from severe problems requiring major adaptations of the curriculum to minor difficulties requiring minimal extra support. Students with FAS/PPAE may not exhibit all the behaviours associated with these syndromes. They may have some to a greater or lesser extent than others, but for the most part, many students seem to have some characteristics in common.

The behaviours seen in children prenatally exposed to alcohol are the result of a number of risk factors resulting from possible organic damage, early insecure attachment patterns and often ongoing environmental instability. These children are particularly vulnerable to the many stresses that may occur in their daily lives. The extremes

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[9] From *Fetal alcohol syndrome and other alcohol-related birth defects* by K. Huebert & C. Raftis. Reprinted with permission.

[10] From "Fetal alcohol syndrome and fetal alcohol effects: principles for educators" by D. M. Burgess & A. P. Streissguth. Reprinted with permission.

observed in a child's behaviour must be understood in the context of the child's experience.[11]

FAS/PPAE last a lifetime, but the way an individual behaves and the type of problems the individual exhibits may change with age. Other behavioural and academic characteristics remain constant, and require ongoing support and modification. It is important to be familiar with the various stages so that adjustments in educational programming can be based on realistic expectations of what the student is able to do while focusing on the student's strengths, talents and accomplishments.

The list on the following pages illustrates possible physical, educational and behavioural characteristics which may be evident. It is a summary obtained from current literature.[12, 13, 14] As more information about FAS/PPAE becomes available and educational intervention strategies are developed and refined, the characteristics may also change and evolve.

Preschool and Early Elementary — Birth to Six Years

Children in this age group may:

Physical

- be small, scrawny; fail to thrive as babies
- be irritable; display tremors and poor sleep patterns as babies
- be short and elf-like in manner and appearance
- have low muscle tone (hypotonia)
- have feeding problems, with poor adjustment to solid foods and disinterest in food
- have erratic sleep patterns
- have hearing and vision problems and poor visual scanning
- have fine-motor deficits including tremors, weak primitive grasp
- have delays in establishing hand dominance
- demonstrate unusual body movements such as head or body rocking

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[11] From *Today's challenge: teaching strategies for working with young children at risk due to prenatal substance exposure* by Los Angeles Unified School District. Reprinted with permission.

[12] From *Reaching out to children with FAS/FAE* by D. Davis. Reprinted with permission.

[13] From *Today's challenge: teaching strategies for working with young children at risk due to prenatal substance exposure* by Los Angeles Unified School District. Reprinted with permission.

[14] From *A Manual on adolescents and adults with fetal alcohol syndrome with special reference to American Indians* by A. P. Streissguth, R. A. LaDue & S. P. Randels. Material reprinted with permission.

Attention and Hyperactivity

- have high activity levels, often flitting from one thing to another
- have difficulties focusing, sustaining attention and taking tasks through to completion
- have difficulties with organization and impulse control
- be impulsive which may compromise safety

Speech and Language

- have speech that lacks content due to reduced vocabulary
- have poor clarity of speech
- display stammering and stuttering, articulation deficits, echolalia (involuntarily repeating the speech of others) and verbal perseveration (persisting with same words, phrases or topics)

Socialization

- be socially engaging and chatty with adults
- not turn to adults for comfort, approval or object attainment
- disregard rules and authority figures
- show indiscriminate attachment to all adults
- have difficulties playing with peers
- be generally friendly and compliant but can demonstrate elements of non-compliance
- experience difficulties with changes in routines and transition times
- have difficulties understanding cause/effect and making choices

Cognitive

- be generally concrete learners
- do quite well academically during the early years
- have deficits in pre-academic and readiness skills.

Elementary School — Ages 7–12

Children in this age group may:

Attention and Hyperactivity

- have difficulties focusing and sustaining attention
- be easily over-stimulated
- be distractible, impulsive and have poor organizational skills

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Entire page from *Reaching out to children with FAS/FAE* by D. Davis, or *Today's challenge: teaching strategies for working with young children at risk due to prenatal substance exposure* by Los Angeles Unified School District, or *A Manual on adolescents and adults with fetal alcohol syndrome with special reference to American Indians* by A. P. Streissguth, R. A. LaDue & S. P. Randels. Material reprinted with permission.

Speech and Language

- have communication deficits and language disorders
- have articulation deficits, poor clarity of speech
- have poor knowledge of the rules of dialogue
- have diminished or inappropriate spontaneous language and reduced sentence length
- be unable to appreciate the communication function of language
- have poor word comprehension and comprehension of verbal directives
- exhibit marked discrepancies between their tested level of verbal language and their actual use of language
- not use attained language to communicate feelings, wants and needs

Socialization

- have social problems
- have difficulties with co-operative play
- choose to play with peers younger than self; play is often immature and inappropriate
- have difficulties perceiving social cues, may result in alienation of peers
- ignore verbal and gestural limit setting
- show restricted ranges of emotion; e.g., lethargy, listlessness, narrow range of emotions, clingy behaviour with adults

Behavioural

- not be able to "read" the teachers' looks or cues
- have increasing classroom behaviour problems; may engage in negative attention-getting behaviours
- have difficulties with changes and transitions
- be unable to end or let go of preferred objects or activities
- have difficulties modulating behaviours; e.g., overreact to "no," mood extremes — giggles turn to screams
- have difficulties predicting consequences of their behaviours which may result in poor judgment
- have illogical thinking with little understanding of cause and effect
- require more repetitions than normal to learn from consequences
- have rigid approaches to problem solving; have difficulties with flexible problem-solving strategies
- engage in lying and stealing; may show no remorse
- have excessive demands for bodily contact

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- engage in sexual exploration with other children
- forget established daily routines
- have tendencies to leave situations when things don't go their way

Cognitive

- demonstrate difficulties with sequential thinking
- start to experience school failure
- have uneven patterns of development
- demonstrate sporadic or intermittent mastery of skills over a prolonged period of time
- be unable to complete previously mastered tasks
- demonstrate a good memory for past events, but have difficulties remembering more immediate events
- have difficulties with school tasks as they become increasingly abstract and language-based
- have difficulties retrieving information unless prompted
- have reading disabilities and early reading difficulties, later problems with comprehension and phonics
- have visual perceptual and spatial organization difficulties
- have memory deficits for both orally and visually presented materials
- have written language disabilities; spelling and creative writing delays
- have difficulties learning mathematics facts, telling time, problem solving
- have difficulties with information processing and abstract reasoning
- have deficits in functional, self-help and daily living skills
- lack persistence and may be reluctant to meet new challenges.

Junior-Senior High School — Ages 13–18

Students in this age group may:

Attention and Hyperactivity

- have attention deficits, memory problems, difficulties with organization and integration of higher order thought processes
- be impulsive, lack social inhibition
- over or under-react to stimuli

Entire page from *Reaching out to children with FAS/FAE* by D. Davis, or *Today's challenge: teaching strategies for working with young children at risk due to prenatal substance exposure* by Los Angeles Unified School District, or *A Manual on adolescents and adults with fetal alcohol syndrome with special reference to American Indians* by A. P. Streissguth, R. A. LaDue & S. P. Randels. Material reprinted with permission.

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Socialization

- have apparent social skill deficits; may start to experience major life adjustment difficulties
- feel rejected by others as a result of many failures and the knowledge that they are different
- experience depression and anxiety
- fall in with wrong crowd in an effort to fit in
- have an absence of social wariness, willingness to go off with strangers
- be emotionally childlike, about seven to eight years of age

Behavioural

- lie, steal, cheat, fight
- have normal sex drive but impulse control is low or non-existent
- have mood swings
- be easily manipulated and led by others
- blame others for problems
- not accept that rules apply to themselves
- have difficulties recognizing and setting personal behavioural boundaries
- show repetitive errors in judgment
- be unable to learn from past mistakes or appreciate right from wrong

Cognitive

- be poor readers and spellers
- find mathematics extremely difficult
- have difficulties with abstractions like time and space
- have difficulties encoding information and shifting attention
- remain concrete in their processing of information
- appear to be attending and focusing on what is asked of them but may not understand the material
- have difficulties planning, making the necessary connections and completing long-term, ongoing projects
- have low adaptive behaviours and functional skills, such as money management, community travel, personal hygiene and safety
- have daily living and communication skills often half their chronological age.

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Section II

Classroom Strategies

One goal of education is for students to become as productive and independent as possible. Not all students with FAS/PPAE will be able to live and work independently as adults, but they need opportunities to function in normal settings with as little support as necessary. At times, the education of these students and their levels of need seem daunting. FAS/PPAE are lifelong disabilities that require lifelong management strategies. No one strategy is sufficient; a combination is required.

It is critical to develop a multidisciplinary team approach, with parents as integral members. When designing an education program, the team must focus on the uniqueness of the student, his or her individual strengths and weaknesses, and determine instructional goals and priorities. Consideration must be given to the physical aspects of the classroom and how they impact on the learning of students. These students require early intervention, concrete learning experiences, decision-making and problem-solving opportunities, and training in functional academics and activities of daily living. Modifications, adaptations and supports are necessary to bridge the gap between what the student knows and the intended goal of instruction. Whenever possible, modifications and adjustments should be temporary in nature and reduced as soon as possible.

The teacher-student relationship is important. When encountering behavioural difficulties, teachers need to direct their frustrations toward the behaviour, not the student. It is critical to remember the organic and physical cause of the disability, and to continue to reflect on how to help the student acquire more appropriate skills for coping. Teachers need to focus on the positive accomplishments of the student and accept that the student may need to be reminded, guided and supervised on a daily basis. Progress may be uneven, with many good days and weeks, followed by major changes in behaviour and skill regression. Some of these students continue to live and grow within an unsettled environment. Stephen R. Covey,[15] in his book *First Things First*, emphasizes the need to carefully consider:

- the Circle of Concern — everything that is of concern
- the Circle of Influence — those areas where change can be facilitated
- the Center of Focus — includes setting and achieving goals.

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[15] From *First things first: to live, to love, to learn, to leave a legacy* by S. R. Covey, A. R. Merrill & R. R. Merrill. ©1994 Franklin Covey. Used with permission.

For educators, the most effective use of time and energy is in the Center of Focus. Educators must accept that constant repetition is necessary to guide students toward maximum levels of independence and that there are factors which may be outside a teacher's influence.

This section provides a description of specific strategies to help teachers design and implement education programs which enhance the educational, social, behavioural and psychological development of students with fetal alcohol syndrome and possible prenatal alcohol-related effects. It also recognizes that educators can not do it alone. Suggestions are offered to assist in increasing the network of support provided to students and their families.

Strategies to Enhance Educational Development

Structuring the Learning Environment

Students with FAS/PPAE need a setting in which classroom materials and equipment can be removed to reduce stimuli or added to enrich activities. The use of supports such as carrels and other independent spaces should not be associated with punishment. Instead, a carrel can be presented as a private office where the student is not to be bothered by other students or as a private place to calm down and regain composure.

Planning for Instruction

When planning for instruction, if possible:

- organize separate locations for various activities to facilitate change and task orientation
- place chalk boards at right angles to reduce sound
- drape windows and close drapes for a quieter classroom
- use plain, pastel-coloured carpeting on the floor or a portion of the floor to reduce the noise level
- use old tennis balls on the legs of desks to prevent noisy movement
- place carpet remnants under desks to reduce the sound of shuffling feet
- use acoustic ceiling tile to prevent sounds from being reflected from the ceiling back into the classroom
- use partitions to break up the classroom, classroom noise and excessive social interactions
- arrange classroom furniture to create traffic patterns which discourage running
- use two desks — a desk at the front of the classroom for focused work and a desk at a different location for less-structured tasks
- use study carrels to help control distractibility and hyperactivity.

Gaining and Sustaining Attention

Actively involve students in the selection of strategies. The more actively students are involved, the more acutely aware they become of what works for them. For example, take a baseline measure of students' independent work durations. Make a contract with students to increase work intervals by small increments. A timer or other form of duration measure, such as a pre-programmed tape recording or beeper, can be used to help students monitor time on task. Increased awareness may eventually lead students to initiate the strategies without external reminders. Encourage students to keep journals of strategies that work for them. Pictures can assist younger students to self-monitor behaviours. For example, provide students with pictures of themselves sitting quietly and attending during a story or circle activity. The picture provides an external cue or reminder for appropriate attending behaviour.

Strategies need to be individualized for students. For example, some students will increase their attention to task if controlled auditory stimulus is provided by allowing them to listen to quiet music through earphones. Some students are able to more efficiently filter out critical auditory information (such as the teacher's voice) from distracting stimuli, when a conference freefield application system is utilized. The freefield system[16] functions as a public address system within a classroom. Many of these students have low seritonin levels in their brains causing a need for external physical hyperactivity. This is often exhibited in the form of physical movement, and frequent touching of objects and people around them. This movement level increases seritonin. Providing these students with interactive materials allows them to transform their external physical energy into internal mental motion, increases attention and enhances memory skills.

Many of these students do not appear to be listening when they actually are. Requiring them to sit still, hands on their laps and eyes on the teacher, often becomes stimulus overload. If they focus on these requirements, they have difficulty processing what is being said. For other students, cultural differences make sustained eye contact difficult. Allow students to visually attend for briefer periods, while actively manipulating an object such as a stress ball in their hands. This helps them channel their physical needs so that they are able to attend and process the information provided.

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[16] From *Teaching students who are deaf or hard of hearing* by Alberta Education, Special Education Branch. Reprinted with permission.

When focusing on gaining and sustaining the attention of students, consider the transitory nature of spoken language. It is important to check frequently to ensure students understand verbal directions. For example, have students retell the requirements for a task in their own words. Whenever possible, accompany verbal directions with written directions.

To enhance attention when designing education programs for students with FAS/PPAE:

- select interactive, hands-on activities which actively engage students and allow them to progress at their own rates
- provide instruction in focusing and attention-training techniques, such as visualization, self-talk skills, organizational strategies and the ability to attribute personal success to personal effort
- schedule more difficult lessons earlier in the day when students are less fatigued
- alternate lessons that require greater auditory attention with those that are more visual or independent
- provide instruction utilizing multiple modalities, such as games, films, puppets, computers, typewriters, calculators, tape recorders, especially when rote learning is required
- pace instruction and the use of materials to avoid over stimulation
- utilize teacher movement patterns and visually scan the classroom to facilitate focused attention; act as a "wandering social reinforcer"
- elicit student responses using varied methods, such as having student pairs work at the blackboard, one as the responder and one as the checker; or having younger students indicate their responses using body movements such as standing or sitting, putting their hands on their heads to indicate agreement, or thumbs up/thumbs down
- allow students to draw, doodle or engage in the manipulation of small objects, such as stress balls, while listening
- break assignments down into short, manageable tasks, using highlighting pens or cut-out frames to capture the essential features of the task
- vary the number of responses required to demonstrate acquisition of a skill by emphasizing quality versus quantity in rote-learning tasks
- make readily available alternate and supplementary materials for optional projects
- individualize auditory stimuli to meet individual student needs — consider the use of a portable tape-recorder with controlled auditory input, a conference freefield application system or earphones to block out noise if the student is sensitive to noise.

To enhance attention when providing instructions:

- minimize all extraneous noises and visual stimuli, especially when teaching new concepts
- actively solicit students' attention by using verbal or physical cues, such as placing your hand on students' shoulders, facial expressions and proximity
- ensure students have ceased the activity they are working on before beginning instructions
- ensure at least initial eye contact at the beginning of instruction by using the student's name or a key phrase and alerting the student when sharing important information
- use non-verbal cues and pre-arranged "secret" signals to avoid drawing unnecessary attention to, or embarrassing the student
- provide directions and new information in clear, well-articulated and simply constructed sentences with natural pauses to allow students time to process between sentences
- use visual references, such as pictures, diagrams, graphic organizers, outlines, models and demonstrations along with verbal instructions and information
- accompany spoken instructions with written instructions for students to refer back to, to enhance recall
- simplify directives by making them as specific as possible to the task at hand
- emphasize key words or phrases with voice tone and inflection
- ensure students understand the sequence of instructions given before beginning any independent work
- use bingo chips and coloured transparency strips to highlight key information when overhead projectors are used.

Organizational Skill Development

Encourage students with FAS/PPAE to move from dependence on you and others to personal independence. The transition may be slow and there may continue to be a need for some guidance. Students must move from external control to internal control in order to prevent "learned helplessness" — the feeling that regardless of what they do, they cannot bring about positive change. Work toward decreasing organizational assistance and facilitating independence in the students' task initiation. Begin by gradually moving from the use of direct cues, such as, "You'll need to take home your math textbook, your binder and your geometry set," to non-directive questions such as "You have math homework. What items will you need to take home?"

Some students need more space on their desks to organize their belongings. A shelf or bookcase can be used. Work in co-operation with the individual student. Ask, "What are some ways to arrange the inside of your desk so that the paper, pencil and eraser are always close

at hand? What should you do with your homework so that you can always find it quickly?" Brainstorm ideas with the student and write down the suggestions. Encourage the student to prioritize one or two strategies. These strategies can also be practised at home to help the student organize his or her room.

According to Edmonton Public Schools, establishing classroom routines is an important step in classroom organization. Teachers need to work with students to develop expectations in the following areas:

- coming into class
- interacting with others
- requesting teacher attention, permission or assistance
- accessing supplies or equipment
- maintaining time on task
- completing assignments
- using unstructured time
- requesting choices or alternatives
- reporting confidences in matters of personal well-being
- knowing the expected behaviour in emergencies.[17]

Develop specific routines for students to follow. Encourage them to develop a sequentially ordered list of activities and tasks they are expected to complete within the routine. Develop the list as a checklist and laminate it for frequent use. Generate different checklists and strategically place them around the classroom, in the coatroom, listening corner, reading centre, on students' desks or in binders. Encourage the use of self-talk as students follow the lists.

Help students organize priorities. Make a daily or weekly calendar or a chart listing clearly and simply everything that has to be done and when. Help organize materials and show students where to begin. Outline the specific steps to be taken before beginning an assignment. Recommend materials to be used and give specific directions on how to begin each task.

When encouraging students to develop independent organizational skills:

- help students with FAS/PPAE become involved with others of the same age group
- pair the student with high-tolerance students when planning group activities
- provide each student with spaces and objects in the classroom, and label items and locations

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[17] From *Planning student programs: health, grades 1 to 9* by Edmonton Public Schools. Reprinted with permission.

- teach students to place notebooks, pencils, erasers, rulers in the same spot after each lesson
- encourage students to keep their desks clear except for what is required for the task at hand
- be precise and concise in your instructions
- assign one task at a time, focusing initially on students' organizational abilities and then on achievement
- review instructions on an individual basis with students who have comprehension difficulties
- encourage students to repeat what they think was said, repeating the expected steps in the routine
- move into new areas of academic instruction gradually, always reviewing past material so that students can experience some degree of success
- preview new concepts and vocabulary at the beginning of lessons and highlight concepts at the end
- write important information on the board to reinforce and focus students' attention
- help students locate and colour code essential information
- have students use different colour codes when studying for different purposes, such as green for action words, yellow for facts
- prepare guides, outlines or cloze activities to help students when taking notes
- record lessons or instructions on tapes for students to review at home
- use records, tapes and other listening devices with earphones to help students develop the ability to listen and understand, while at the same time shutting out conflicting sounds
- use simple aids, such as arrows, to indicate direction in reading and writing; a dot in the top left-hand corner to show where to start
- encourage students to use wide-spaced paper or have students write on every second line
- use graph paper or lined paper turned sideways to organize mathematics problems on the page
- use a ruler, a coloured transparency strip or plain sheet of paper under each line being read
- use visual timelines to develop time-management skills
- provide a daily school assignment notebook that the teacher verifies and the homeroom teacher checks
- develop a homework rules checklist
- assign a homework coordinator, such as the homeroom teacher, the counsellor or a favourite teacher
- provide a daily and weekly school conduct card with school point system and suggestions for home use

- provide an extra set of textbooks for home use if students are unable to manage getting their books to and from school
- offer extra assistance after school with problem subjects.

Planning for Generalization

Students with FAS/PPAE frequently encounter difficulties transferring skills they acquire in one situation to new situations. To encourage generalization of learning, select individual program goals which can be taught across learning situations. In targeting for generalization, consider all the naturally occurring times throughout the day and the different ways students may be required to carry out specific tasks. Provide instruction which incorporates as many of these as possible. One effective strategy is to employ the use of a curriculum matrix.

Curriculum Matrix[18]

NAME										
IPP GOALS	Math	Soc	Health	L A	I A	Foods	Drama	Other Environments Home	Voc	
Goal 1: Evaluate possible plans and select one	X	X	X	X	X	X	X	X	X	
Goal 2: Demonstrate increased ability to make decisions	X	X	X		X		X	X	X	
Goal 3: Active engagement in a variety of new learning situations	X				X	X	X	X	X	
Goal 4: Learn and apply a variety of new strategies to improve study skills	X	X	X	X				X		
Goal 5: Work co-operatively with others	X	X	X		X	X	X	X	X	

The matrix is used to link students' individualized program plan objectives and opportunities for achieving these objectives within their instructional day. The matrix is completed by listing the individualized program plan objectives along the left vertical axis and the courses of study and activities along the horizontal axis. Home and the community can also be included along this axis to encourage generalization of the skill to settings outside the school. The planning team identifies the objectives which can be taught logically and appropriately during specific courses and activities. This strategy builds generalization directly into the instructional process.

[18] From "Meeting functional curriculum needs in middle school general education classrooms" by S. Field, B. LeRoy & S. Rivera. Reprinted with permission.

When planning for generalization, target skills that are:
- reinforced in the natural environment
- used frequently and in several situations
- used in the natural context and in the presence of natural cues
- critical to students and likely to increase their functional independence both at school and home.

When providing instruction to facilitate generalization of learning:
- teach skills in several different settings
- utilize natural materials and environments whenever possible
- provide additional prompts, initially if required, to help students recognize when to use the skill
- rotate instructional providers
- build the skills into a routine or chain of related skills
- communicate with the home as skills are acquired
- provide a periodic reinforcement schedule to ensure the skill is maintained
- conduct periodic assessments to check for generalization
- implement remedial instruction if generalization is not achieved.

Functional Life Skills and Functional Academics

It is important to remember that many adolescents and adults with FAS are emotionally immature — 98 per cent cannot handle money wisely and 50 per cent need help with basic hygiene (Davis, 1994, p. 30). The greatest deficit is in functional skills and adaptive living skills. Even students who appear to have normal academic skills have difficulty generalizing them to settings outside the classroom. The inability to predict consequences or use appropriate judgment in daily life makes it difficult for young people with FAS/PPAE to be successful in vocational settings.

These functional essential and supportive life skills must be incorporated into the context of courses included in the programs of study. The academic, knowledge-based skills are essential learnings in these studies. Of equal, or in some cases greater importance for some students are the other essential components, such as making appropriate choices and decisions, and recognizing steps within academic and functional daily routines. These skills help students live and succeed in the everyday world. Many of the skills are acquired naturally by most students. Students with FAS/PPAE need to be systematically taught these skills.

Assessment of functional life skills must:
- be conducted frequently
- be conducted in the context of the natural environment
- focus on the present and future environments in which students will live and work
- assess students' strengths and areas of need.

The functional academic sequence must:
- focus on students' strengths to avoid chronic failure and low self-esteem
- allow for several teaching opportunities
- lead to meaningful outcomes for students
- lead directly to the desired skills or outcomes
- be age-appropriate.

Essential and Supportive Skills for Students with Developmental Disabilities, Book 2 in the *Programming for Students with Special Needs* series, provides examples of life skills in the areas of: domestic and family life, personal and social development, leisure/recreation/arts, citizenship and community involvement, and career development. See page FAS.53 for annotation.

Social isolation, victimization and difficulties with the justice system are tragically common among young people with FAS/PPAE. Difficulties maintaining friendships and building independent, productive futures are further compromised by difficulties with communication skills, the inability to predict the consequences of their behaviours and impassivity.

Streissguth, LaDue & Randels conducted a study of individuals with FAS in which the mean age was 17 years old. The study found that the mean adaptive living skills age of these individuals was seven years. They had the bodies of 17-year-olds with all the normal physical changes and urges, but the understanding and ability to think things through of seven-year-olds.[20]

Because of this discrepancy between the chronological age and the adaptive living skills age, students often have a great deal of difficulty relating to same-age peers.

Strategies for Social Development

Yet their dependency, sweetness, and desire to please, when coupled with an inability to learn from experience and hence to appreciate right and wrong, puts them at risk — whether through their own bad judgment or under the sway of others — of committing criminal acts without appreciating their wrongfulness and without the ability to conform to the law's requirements.[19]

A. Morgan Capron

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[19] From "Fetal alcohol and felony" by A. Morgan Capron. Reproduced with permission.

[20] From *A Manual on adolescents and adults with fetal alcohol syndrome with special reference to American Indians* by A. P. Streissguth, R. A. LaDue & S. P. Randels. Material reprinted with permission.

Most individuals with FAS/PPAE require some form of structured, sheltered, living situation throughout their lives. Many require assistance in developing appropriate social interaction skills. Following the acquisition of skills, many continue to require ongoing supervision to prevent them from reverting to inappropriate habits. Some students take longer to acquire skills but are able to achieve relative independence. To enhance social skill development, instruction must begin during early intervention programs and be systematically integrated into curriculum areas such as language arts and social studies. There are several commercial social skills programs available. Please see *Teaching for Student Differences* for an annotated bibliography of recommended resources and *Teaching Students with Learning Disabilities* for additional resources and strategies for enhancing self-esteem and teaching social skills. Annotations for *Teaching for Student Differences* and *Teaching Students with Learning Disabilities* can be found on pages FAS.53–54.

To help students acquire social skills:

- identify environments which enhance and support appropriate behaviours
- establish clear boundaries between appropriate and inappropriate behaviours
- provide maximum levels of supervision
- enforce limits over and over
- use concrete examples and visual aids
- use praise and reinforce often
- focus on both the present and future environments
- teach skills specific to each environment
- provide checklists for basic social and living skills
- involve students in the selection of skills and targets for instruction
- be aware of possible discrepancies between their verbal language and their actual ability to communicate concepts or needs effectively
- incorporate critical aspects of communication such as posture, eye contact, voice quality and proximity
- teach the skills of seeing things from different perspectives, formulating ideas and making decisions
- integrate culturally relevant values, such as making eye contact, giving compliments, ownership of property
- incorporate the use of role plays, mind maps, and comparing and contrasting exercises to assist students in the decision-making process
- teach appropriate ways to express feelings and to say "no"
- demonstrate how lack of awareness of social expectations can lead to misunderstandings

- teach simple money management, social interaction skills and work-related social skills
- teach and reinforce appropriate leisure skills
- incorporate safety and street-crossing skills
- increase focus on predictions, consequences and cause/effect as students approach adolescence.

One effective instructional strategy that helps students focus on the required skills in a stress-free learning environment is the use of role plays. However, learning a series of skills in a role-play situation does not ensure that students can successfully perform those skills in the natural environment. Many have difficulty generalizing from role-play situations to everyday events. It is often necessary to teach social skills in the hallways, cafeteria and community as they are required. Sometimes, it is necessary to talk to a student privately about incidents of socially inappropriate behaviour. In a kind and supportive way, help the student understand the nature of the mistake. Try to determine the student's intention and help generate a more socially acceptable way of attaining the goal. Rehearse through role play. Be prepared to support and reinforce during subsequent opportunities to practise the skill.

Another effective strategy is the use of social stories. Social stories are written to describe social situations that are difficult and/or confusing for students. Each story identifies and describes relevant social cues and desired responses to a target situation and is written with consideration of the student's abilities and learning style. Social stories are accompanied by pictures which are used to help make the stories understandable.[21]

Many of the social routines outlined in prosocial skills resources, such as *Skillstreaming in Early Childhood* by McGinnis & Goldstein can be individualized to student needs and modified in the form of social stories. These social stories can be scripted into simple video role plays or taped stories to allow students to revisit them several times. A social story for a student who has difficulty handling frustration may be accompanied with picture illustrations and read like the following:

If you get upset . . .
- No crying
- No hitting the table.

Then you need to . . .
- Relax
- Put your head down
- Have a quiet voice.

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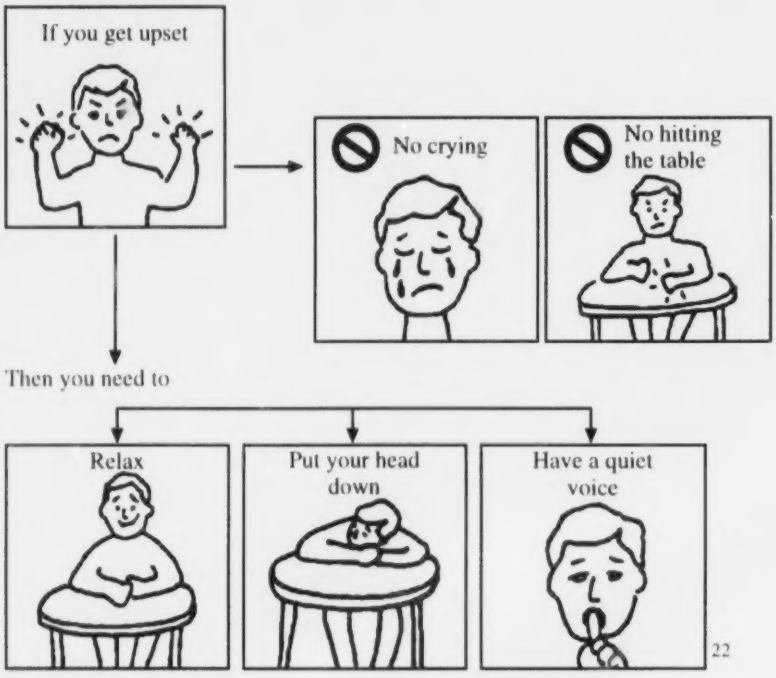
[21] From *Teaching children with autism: strategies to enhance communication and socialization* by K. A. Quill. Reproduced by permission.



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Gray says social stories:

- describe correct behaviours and responses for any situation in a non-threatening manner
- translate goals into understandable steps
- teach a wide variety of appropriate strategies to assist in coping with behaviours such as aggression, fear or compulsions
- teach new routines and rules
- help students accommodate to changes in routines
- present academic material in a realistic, concrete manner
- teach sequencing skills.[23]

Adolescence is a volatile time for students with FAS/PPAE. Many begin to recognize that they are different and that they are not acquiring social skills at the same rate as others. They begin to realize that they "are just not getting it." Many are at serious risk of depression, suicide, alcohol and drug abuse, physical and sexual abuse, pregnancy, homelessness, legal problems, poor social judgment and underdeveloped independent skills. They may require psychiatric care and psychological counselling. Many suffer low self-esteem. It is critical to focus on their strengths, talents and positive accomplishments.

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[22] From "Solving social-behavioral problems through the use of visually supported communication" by L. Q. Hodgdon. Used with permission.

[23] From *The Original social story book* by C. Gray (ed.). Reprinted with permission.

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Students with FAS/PPAE can easily become victims and are at risk of being used for sexual or illegal purposes. Remind students daily not to go with strangers or allow themselves to be manipulated by others. Hingsburger in *Just Say Know* outlines several challenges which arise when providing appropriate social-sexual instruction. The challenges include: confused self-concepts, isolation from heterogeneous groups of peers, lack of sexual knowledge, learned patterns of inappropriate sexual behaviour, inconsistent social-sexual environments and lack of personal power. Besides social skill training, practical sexual knowledge must be incorporated into the curriculum on a regular and systematic basis from an early age in order to address these challenges.

Hingsburger recommends the following:

- To modify sex education programs for students with FAS/PPAE:
  - present information in smaller units
  - increase the use of concrete, visual materials
  - increase opportunities for learning
  - increase the use of role-play situations to practise skills
  - use additional supports, in context, to assist in generalizing the knowledge to everyday events.

- Watch for signs of sexual abuse, such as:
  - unusual or sophisticated sexual behaviour
  - talking about sexual issues in public
  - compulsive compliance behaviours
  - extremes in behaviour; e.g., an over-sensitive sense of privacy or lack of a sense of privacy
  - changes in daily living skills, social or performance skills
  - changes in emotional stability including loss of emotional response, loss of appetite, avoidance of former close friends, changes in leisure habits
  - changes in sexual expression, aggression, noncompliance, accident proneness.

- To build a ring of safety to support students with FAS/PPAE:
  - identify one person in the school that the student trusts and can talk to
  - teach students the ability to noncomply — allow opportunities for students to say "no" and for the decision to be honoured
  - develop privacy awareness, a healthy self-concept and self-confidence
  - provide options for healthy sexuality and appropriate interactional skills with peers.[24]

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[24] From *Just say know: understanding and reducing the risk of sexual victimization of people with developmental disabilities* by D. Hingsburger. Reprinted with permission.

Strategies for Enhancing Behavioural Development

Fair does not mean that everyone gets the same. Fairness means that everyone gets what they need. In order to be fair they have got to be treated differently.[27]

R. D. Lavoie

General Considerations

It is critical to understand the organic nature of these disabilities when considering behavioural difficulties and possible intervention strategies. Recent brain research demonstrates actual differences in the sizes of brains of children with FAS/PPAE compared to children who do not have FAS/PPAE. Schroeder states that researchers have found uneven patterns of development between the right and left sides of the brain. This often causes seizures which are common in individuals with FAS. A large part of the frontal lobe is missing which is thought to be the area responsible for abstract thought, and understanding outcomes and consequences among other things.[25] While many students with FAS/PPAE act in ways that could be considered irresponsible, research suggests that their behavioural difficulties may be due to memory problems, their inability to problem solve effectively, or to their becoming overwhelmed. Sprick & Howard suggest that these students' concept of reality may also be misconstrued.[26]

Comprehensive assessments in the context of natural routines are essential to help determine the skills students use in routines, such as during play, at transition times and while engaging in self-help activities. Close observation of students' behaviours at these times indicates how they experience stress, relieve tension, cope with obstacles and react to change. This provides essential information and assists in determining realistic expectations for students.

Actively involve parents when establishing behavioural goals. Establish clear, open lines of communication with parents so that they will inform the school if there are upsets in the home, changes of routine, family emergencies or changes in students' sleeping patterns. These may cause sudden changes in behaviours. Students function best when there is a common structure and when consistent strategies are used at both home and school.

Students with FAS/PPAE require more structure, supervision and encouragement than others. Structure and routine offer a predictable environment in which students' comfort levels grow. It is crucial to provide a balance between structure and the independence that enables students to use the skills acquired. If students are controlled when ready to grow, they may resort to challenging behaviours to meet their

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[25] From *An Overview of fetal alcohol syndrome and fetal alcohol effects* by C. A. Schroeder. Reprinted with permission of Dr. Cheryl A. Schroeder, Creative Consultants, Inc.

[26] From *The Teacher's encyclopedia of behavior management: 100 problems/500 plans* by R. S. Sprick & L. M. Howard. Reproduced with permission.

[27] From *The F.A.T. City learning disability workshop: discussion guide* by R. D. Lavoie. Reprinted with permission.

needs. If students' lives are too rigidly structured, they are unable to learn self-management.

For young students, play is a critical teaching and learning medium for acquiring appropriate behavioural skills. Through play, students learn how to learn, to explore and manipulate the environment, cope with the perplexities of life experiences, express feelings and become symbolic thinkers.[28]

To facilitate increased use of appropriate behavioural skills when working with students with FAS/PPAE, remember to:

- use concrete, tangible reinforcers
- move toward as natural and logical consequences as possible
- model and teach appropriate behaviours
- use specific behavioural descriptors
- accept and be prepared to teach the same concept many times over
- use natural situations as teaching opportunities when they arise
- plan for generalization across situations
- reduce stress, be alert to physical symptoms such as irritability, agitation and over-reactions to minor occurrences
- maximize structure and routine
- avoid placement with multiple teachers
- prepare and rehearse for special events
- plan for transition between activities
- keep changes to a minimum
- encourage by catching and nurturing small levels of appropriate behaviours
- praise, praise, praise.

Developing a Behavioural Intervention Plan

It is important to keep in mind that students belong first and foremost to the school and then to the classroom. A team approach is a critical component when developing successful behavioural intervention plans. Planning together ensures clear understanding by all involved and prevents teachers from feeling alone in attempting to solve difficulties. The teacher, parents, student and others involved with the student, such as co-teachers, administrators, special educators, school psychologist, school nurse, counsellor or members of a teacher's assistance or problem-solving team, need to come together to determine the student's areas of greatest challenge. Establishing priorities helps the team focus on what is most critical for the student to learn. Once the team selects and defines a particular target behaviour as the focus, a

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[28] From *Today's challenge: teaching strategies for working with young children at risk due to prenatal substance exposure* by Los Angeles Unified School District. Reprinted with permission.

behavioural intervention plan is developed. Developing clear procedures and guidelines for intervention increases the likelihood of successful intervention, and enhances the motivation and confidence of the team to use behavioural methods with other problems. In the initial planning stages, selecting a less-serious behaviour to address increases the opportunities for a successful learning experience.

Once the target behaviour is selected, the team gathers information. They must determine what purpose the inappropriate behaviour is currently serving, and what factors might be reinforcing and maintaining the behaviour by observing and recording occurrences of the behaviour, the cues and consequences surrounding the behaviour, and the particular setting in which it occurs. Data collection charts are helpful and assist with record keeping. The data must then be analyzed to determine the frequency of the behaviour's occurrence, the factors seemingly precipitating the behaviour, its nature, the time of occurrences and the consequences. Once the apparent situational factors surrounding the behaviour are established, the next step involves identifying environmental factors that can be altered to positively influence the behaviour. For instance, altering the controlling cues for the behaviour, the consequences for the behaviour and the timing with which these consequences are delivered can result in positive changes.

For an intervention plan to be successful, clear rules and expectations for appropriate behaviour must be communicated to students. Effective reinforcement systems and clear consequences should be established. Students need regular, ongoing feedback about their behaviours. Intervention plans should be monitored on a regular basis and modified as needed.

Understanding Communicative Intent of Behaviour

Every behaviour serves a purpose. The first step is to generate a hypothesis about the student's message and then test the hypothesis by teaching alternative forms of behaviour. For example, if it is hypothesized that a student is engaging in a multitude of task avoidance behaviours because he or she feels the work is too difficult, then communicate clearly to the student the hypothesis, "I see by your behaviour that you are telling me that the work is too difficult for you." Teach the student to communicate his or her feelings in a more acceptable manner such as raising a hand to request help and then reinforce those attempts. Help the student build trust in the fact that his or her communication has meaning.

When shaping appropriate behaviours:

- recognize communication deficits, understanding the various forms of communication
- remember that students may be communicating via inappropriate behaviours, actions and/or verbalizations
- look for communicative intent
- investigate students' behaviours by asking questions to discover what they need, want or fear
- create a stable environment where students feel safe to express feelings, wants and needs
- model and teach alternative, more appropriate forms of communication
- give students the words and strategies required for particular situations
- respond to specific needs of students with predictability and regularity
- respond to muted signals and provide students with a verbal explanation of the behaviour
- help students understand and interpret the communication of others. For example, move close to students, look at them and help them read your cues by explaining what your look, body language or gesture means
- encourage students to ask questions when confused and praise them for taking the initiative
- establish a positive feeling about asking for assistance, asking questions or asking for repetition.

Establishing Clear Rules and Expectations

Rules are guidelines of acceptable behaviour or procedures. Rules clearly define what is and what is not acceptable in the classroom, in the school and on school grounds. When establishing classroom rules, it is important to establish a hierarchy of general rules for all students. Focus on rules which are essential to smooth classroom operations. Rules must be made before, not after the fact, so that each student knows what to expect. Rules should be posted, referred to frequently and rehearsed regularly. A teaching tool to assist in understanding rules is the use of guided observation. Guided observation involves directing a student to watch another student who is following a rule successfully. This technique helps students attend and focus on the critical dimensions.

Rhode, Jenson & Reavis state that the following characteristics are critical when establishing good proactive rules. Rules should be:

- observable — clearly describe the expected behaviours
- measurable — the rule must be able to be counted or quantified in some way

- stated in the positive — describe what you want students to "do" rather than "not do"
- only five — start with the most critical behaviours
- specific — avoid ambiguous rules that are open to misinterpretation.

Some sample rules include: turn in assignments on time; listen when someone is speaking; raise your hand if you have something to say or something to ask; and walk, don't run, at all times in the classroom or halls.[29]

Too many rules may teach compliance but at the expense of limiting students' creativity and their motivation for problem solving and self-mastery. By limiting classroom rules, students are encouraged to explore and actively engage in their social and physical environments. Students are encouraged to express their feelings but within the limits of acceptable behaviours. Repeated inability to express their feelings appropriately and follow rules may be a signal that students' needs are not being met. Further investigation may be warranted.

Establishing Clear Consequences

As with rules, consequences must be clearly defined, consistent, predictable and understood by all. Establish both positive consequences and reductive consequences ahead of time. Positive consequences are designed to increase the occurrence of a behaviour. Reductive consequences are used when students are not following the pre-established classroom rules and are designed to reduce or eliminate the occurrence of inappropriate behaviours. To be most effective, use verbal, high energy consequences to reinforce appropriate behaviours. Use nonverbal consequences, delivered in a calm manner for inappropriate behaviours. Phelan states that when employing reductive techniques, sometimes silence speaks louder than words.[30]

Use a "what if?"[31] chart to help establish and utilize consequences. A "what if?" chart is in the form of a T-chart. Reductive consequences are listed on the right side, along with how long each consequence is used. Reductive consequences increase in severity as they go down the hierarchy on the chart. A pre-planned set of consequences for crisis or out-of-control behaviours is also included. The left side of

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[29] From *The Tough kid book: practical classroom management strategies* by G. Rhode, W. R. Jenson & H. K. Reavis. Reproduced with permission.

[30] From *1-2-3 Magic: training your children to do what you want* by T. W. Phelan. Reprinted with permission.

[31] From *The Tough kid book: practical classroom management strategies* by G. Rhode, W. R. Jenson & H. K. Reavis. Reproduced with permission.

the chart lists positive consequences for compliance. Students can help generate the list of positive consequences. The chart can be effectively generalized to home use. For example:

WHAT IF? CHART

Positive Consequences	Reductive Consequences
• extra free time or special activity • allowed to work at teacher's desk • extra snack • extra 10 minutes favourite video • student allowed to spin reinforcer wheel • allowed to sign Superstar book	• verbal warning from teacher • wait three minutes after dismissal • loss of rewarding activity • must sit in desk by teacher • must eat lunch in the classroom • loss of five minutes of free time

Using Reinforcement Systems

Many students with FAS/PPAE become accustomed to failing and the attention they receive from failing. When designing a behavioural program, the goal is to ensure success.

Sprick & Howard state that ultimately, the student is reinforced through naturally occurring, intrinsic motivation embedded in the activity. Intrinsic motivation comes from such things as the enjoyment of the task, satisfaction in doing a job well and feeling good about working hard. Initially, however, when an activity involves using newly acquired skills or skills which are difficult for the student, it may be necessary to start with structured reinforcement systems (stars, checks, tokens which can be cashed in for materials or activities predetermined on a reinforcement menu). Then, move gradually to intermittent reinforcement and then to social reinforcement, such as praise, notes on paper, smiles and other signs of approval.[32] *The Tough Kid Tool Box* contains useful information about reinforcement systems. See page FAS.58 for annotation.

It is critical for students with FAS/PPAE to have the experience of being and feeling successful. These students have a high reinforcement tolerance level. Initially, students may need to receive reinforcement for incremental steps toward a goal. To get them hooked on success, reinforce approximations and small improvements in appropriate behaviours. The emphasis can gradually be shifted from extrinsic rewards to intrinsic motivation.

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[32] From *The Teacher's encyclopedia of behavior management: 100 problems/500 plans* by R. S. Sprick & L. M. Howard. Reproduced with permission.

When designing a reinforcement system:
- develop a thorough list of reinforcers
- enlist the help of students, families and peers in generating a listing of social, activity and tangible reinforcers
- recognize and consistently praise students' attempts and accomplishments
- deliver reinforcers and consequences immediately, consistently and specifically
- use a combination of reinforcers.

Using Reductive Techniques

Consequences designed to reduce behaviour must be realistic, enforceable and match the severity or intensity of the behaviour. Reductive consequences are most effective when they are of a short duration. The guideline suggested in the literature is "one minute per age of the student."[33, 34] Timeout or time away, whenever possible, should be served in the classroom. Another effective strategy to facilitate serving timeout in the classroom is "Bumpy Bunny" timeout. When using this strategy, the activity or toy the student has selected for free time goes into timeout. The student continues to work during free time while the toy serves the timeout.

Remember when delivering reductive consequences:
- ensure you have students' attention
- do not repeat requests or reason with students over misbehaviours
- explain no more than twice why a behaviour is inappropriate
- avoid using a question format when giving a request. Use statements such as "Please start your work," instead of "Can you get started on your work?"
- use close physical proximity when making a request
- use a quiet, calm voice
- give students time to comply.

Students with processing difficulties often need five to seven seconds to process information. Repetitions during that time interrupt the original processing time. Ensure that students are allowed sufficient processing time to follow through with requests before instituting consequences.

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[33] From *The Tough kid book: practical classroom management strategies* by G. Rhode, W. R. Jenson & H. K. Reavis. Reproduced with permission.

[34] From *1–2–3 Magic: training your children to do what you want* by T. W. Phelan. Reprinted with permission.

Fredericks (1975, p. 12), in *A Data Based Classroom for the Moderately and Severely Handicapped*, suggests that in order for students to feel positive about their learning environments, a ratio of at least four positive interactions to every negative or reductive consequence is necessary. The following strategies are effective in reducing the frequency and negative impact of reductive consequences.

Problem areas, such as difficulties that occur during transition, are often predictable and can be avoided. Planning effectively in advance can reduce the need for reductive consequences. Begin by increasing student awareness of situations which may cause them difficulties. Involve them in problem-solving strategies to prevent inappropriate behaviours. If problems seem inevitable, problem solve alternatives into constructive solutions. For instance, the student might be allowed to begin dressing slightly ahead of others if he or she is likely to be involved in impulsive or aggressive behaviours during that time.

If the circumstances surrounding an inappropriate behaviour appear to be obvious, deliver the consequence in a timely manner. Avoid escalating a situation by asking questions that you already know the answers to, especially when the answer does not affect the consequence. For example, if more than one student is involved in a misbehaviour such as fighting, avoid asking questions such as, "What happened?" or "Who started it?" This only encourages students to become defensive. Fighting is not appropriate. Employ a reductive consequence.

If the target behaviour involves enhancing students' co-operative behaviours for tasks, such as getting started quickly on work, doing homework or participating in clean-up, specific consequences or a combination can be effective. Positive verbal feedback should be used regularly on an intermittent schedule and tailored to the students. Set clear timelines for work completion. Using timers, buzzers and stop watches to set non-negotiable timelines lessens students' attempts to engage in bargaining. Provide students with a simple chart or checklist of the expected steps to be completed and a space to check the steps as they are completed. If the student does not finish, employ a reductive consequence and then have the student complete the task, following the consequence.

Phelan suggests the use of the 1–2–3 or counting method to stop frequent minor behaviours, such as arguing, fighting, screaming, tantrums and teasing. The method needs to be accompanied by two cardinal rules: no talking and no emotion. Simply stating the number warning encourages students to stop, think about what they are doing wrong and take responsibility for changing the behaviours. Talking or

explaining, following a count, shifts the responsibility back to the teacher and often leads to verbal repetition. Long verbal discourses make it difficult for students to clearly pick out the warnings and can result in verbal power struggles between teachers and students.[35]

Managing Over-active Behaviours

Many students with FAS/PPAE have attention difficulties and related hyperactivity. They have difficulty controlling their arousal levels. The frequent need for movement is common. Proactive planning is necessary to help minimize the need for movement and to ensure that the movement patterns are as purposeful as possible. When structuring activities, allow for frequent changes, carefully alternating activities requiring movement with those less active in nature. When changing activities, allow for a calming time in between. Provide opportunities for legitimate breaks. For example, coupons for free trips to washrooms, water fountains and pencil sharpeners can be built into reinforcement.

When planning for over-active behaviours:

- seat the student in a quiet location away from pencil sharpeners, cupboards, windows, colourful displays and unnecessary materials
- if the student is seated near your desk, note the activity level
- seat the student in front of others or next to appropriate role models, such as a student who is less active but who has good work habits
- keep the student close to where you speak or usually present instruction
- send young students in small groups to get materials and into crowded areas such as coatrooms
- maintain routines
- provide proper seating to minimize movement
- limit timeframes for one activity to no more than 15 minutes for younger students and 30 minutes for older students.

Managing Transitions

Students with FAS/PPAE need settings which maintain continuity and reliability through routines and rituals. Scheduling activities to occur in a predictable order strengthens students' self-control and their sense of mastery over the environment. Moving from one activity to the next often causes anxiety and behavioural disruptions for these students. Transition times must be seen as activities in and of themselves, and as such have a beginning, a middle and an end. Remember, time not structured in a classroom is an opportunity for

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[35] From *1-2-3 Magic: training your children to do what you want* by T. W. Phelan. Reprinted with permission.

disruptive behaviour. Keep the time required for transitions to a minimum and carefully plan each transition.

When planning for successful transitions:[36]

- plan activities that students can succeed at so that they are enthusiastic about trying the next activity
- alert students routinely a few minutes ahead of time that the activity will soon be over
- use a timer in addition to verbal reminders
- prepare students for change by talking about the next activity before beginning it
- offer an item to be used in next activity to ease the feeling of loss at leaving the last activity
- organize materials and have them readily available
- confidently stop one activity and initiate the next
- increase the monitoring of students during transition times
- praise and recognize those who make transitions quickly and co-operatively
- assist non-readers with daily picture schedules
- provide opportunities for students to physically end an activity before beginning the next; e.g., put one picture or article representing the activity away or turn a picture over before going on to the next activity
- create a sense of control in students by giving them opportunities throughout the day to feel they have control over their environment
- provide frequent opportunities for students to make choices about where they want to work and the types of activities or materials used within an activity
- use teachable moments to help students to prepare for and cope with change and ambivalence.

Common Concerns and Issues

When working with students with FAS/PPAE, two behavioural concerns frequently mentioned are lying and stealing. Both behaviours are impulsive in nature. As students with FAS/PPAE have difficulty learning consequentially or from mistakes, the following strategies from Sprick & Howard[37] may help reduce the occurrence of these behaviours.

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[36] From *Today's challenge: teaching strategies for working with young children at risk due to prenatal substance exposure* by Los Angeles Unified School District. Reprinted with permission.

[37] From *The Teacher's encyclopedia of behavior management: 100 problems/500 plans* by R. S. Sprick & L. M. Howard. Reproduced with permission.

When designing intervention programs to help reduce incidences of lying, approach the situation in a calm rational manner. Emotional overcorrections for lying affect students' self-esteem and frequently lead to verbal power struggles. This may result in students becoming more accomplished at lying and has a tendency to reinforce, rather than diminish the behaviour. Avoid asking redundant questions which may cause students to feel cornered. When students feel cornered, they may instinctively answer what they think the adult wants to hear, before considering the consequences of not telling the truth. Provide students with time to make appropriate decisions. Two motivational factors are frequently at work when students are involved in frequent lying — to impress others or to avoid trouble. It is important to examine the motivation when formulating an intervention strategy.

When students fabricate stories to impress other people and build their own egos, try building on their strengths and their story telling abilities. Provide students with opportunities to record stories into a tape recorder or tell younger children a story. Help students distinguish story telling from lying by providing them with positive opportunities to tell stories. When you suspect students may be "story telling," ask them a simple choice question, "Truth or Story?" This cues students to stop and think before digging themselves into a bigger hole.

When students lie to avoid trouble, analyze the situation carefully. If you have a clear picture of what has occurred, tell the students what you know. Provide students with the consequence and end the conversation. If it is necessary to ask what has occurred, provide students with time to make good decisions. Let students know you will be asking for an explanation in a little while, perhaps 15 minutes. This allows students time to consider making appropriate decisions to tell the truth. If students tell you the story and you find out later that they lied, then apply reductive consequences for both offences. The consequences should be dealt with in a calm, matter-of-fact manner.

When students steal, understanding the motivation for the theft helps determine possible intervention strategies. Consider the cultural background of the student, as some cultures operate within an "everything belongs to everyone" approach. It may be necessary to implement an intervention that teaches students not to take the property of others but is respectful of family beliefs. Sometimes, students steal because they need or think they need the items. Some students with FAS/PPAE have unsettled family lives which affect their ability to attach. These students may fixate on physical items due to their insecurities. Students may steal to seek negative attention or gain power in an attempt to compensate for poor social skills or academic failure. Concurrent efforts must then be made to ensure academic success and improved social skills.

In establishing and implementing appropriate consequences, be sure to:

- implement consequences only when you have proof
- establish and implement appropriate consequences
- follow school and district policies regarding searches
- involve school administration
- use restitution or restitution plus community service
- elicit an apology to the victim, in person or in writing
- call the parents.

Burgess & Streissguth suggest that students receive increased praise and attention for responsible behaviours. This fosters the belief that they are responsible people and shows that the many positive things students do are noticed. Some students require ongoing, professional counselling to deal with deeper, underlying security issues.[38]

Strategies for Developing Self-management

The goal of behavioural intervention strategies is to help students with FAS/PPAE eventually develop their own self-management skills. Students need to understand and be aware of their difficulties before they can begin to manage their behaviours.

To help increase awareness and self-management:

- share your strengths and weaknesses
- encourage students to make lists of their strengths and weaknesses
- offer feedback when students are attending, calm and relaxed
- share your observations when students have difficulties
- help students interpret the nonverbal cues of peers
- rehearse expected behaviours immediately before situations where some independence is required
- model, discuss, demonstrate, rehearse and evaluate a variety of problem-solving strategies
- prepare and practise for problem situations
- emphasize the difference in obtained results when effort is applied and when it is not
- work with students to explore the effects of various strategies
- encourage students to keep a book of strategies listing coping strategies that work for them.

To teach students strategies to monitor their behaviours:

- provide them with checklists of target behaviours
- provide reminder notes
- encourage them to record and graph their own behaviours

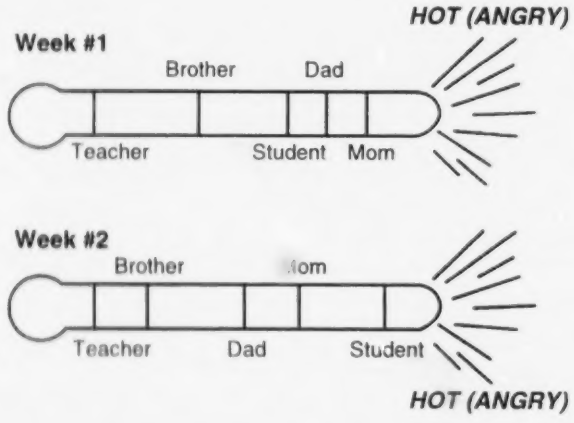
[38] From "Fetal alcohol syndrome and fetal alcohol effects: principles for educators" by D. M. Burgess & A. P. Streissguth. Reprinted with permission.

- provide recorded taped intervals to assist in monitoring
- use cut-out folders to hold assignment sheets and to help focus on the task
- write key behavioural goals on the folders as nonverbal reminders; e.g., "Remember to raise your hand."

To teach students to stop and think of alternatives before answering or acting out:

- model and demonstrate the use of self-talk to guide their behaviours
- employ role-play and natural-play situations as opportunities for the student to practise self-talk
- help students internalize self-talk strategies by teaching key phrases to focus attention and resist distractions, manage frustration and delay, self-reinforce with positive affirmations, anticipate consequences, relax and appreciate the feelings of others.

To help develop self-management skills, students need to be able to identify the feelings they experience. *Reaching Out*[39] provides many strategies to help students communicate and label their feelings. For students experiencing repeated feelings of rejection, anger, hostility and turmoil in their lives, it can be difficult to put things in perspective. Students may feel that everyone is "out to get them" or that everyone is angry with them. One effective technique to help students gain some perspective and communicate how they are feeling is the use of a picture of a thermometer.



Draw large thermometers on pieces of paper and indicate which end means hot. Have students mark them to show how hot or angry they are. Ask them to make marks to represent how hot or angry other family members and people in authority are. Use different coloured pens for each individual. This gives an idea of what the family

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[39] From *Reaching out to children with FAS/FAE* by D. Davis. Reprinted with permission.

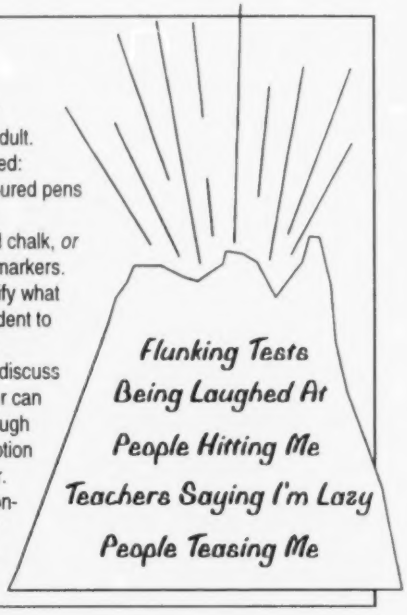
dynamics are like and how students feel in relation to other family members. As the dynamics change, continue to seek students' ratings. Address the feelings students continue to have, helping to work them out so they feel less-stressed and more in control of their behaviours.

Another technique[40] is to have younger students colour a drawing of a person different colours for different emotions. For example, "Colour how much of you feels happy, angry, sad or scared." This is a helpful strategy to use early in the day for students who have extreme mood swings or whose home lives may be unsettled. Intervening early in the day establishes connections and may help students leave behind their unsettled feelings during the time they are in school.

Many students are filled with rage and prone to angry outbursts because they become frustrated easily and have little or no impulse control. Refer to anger as energy to help to reduce the stigma. Visual strategies are an effective part of learning to manage anger. For instance, use the technique below of having students compare an angry outburst to a volcano.[41]

The Volcano

Appropriate for ages three to adult.
Materials needed: Paper and coloured pens or crayons, *or* blackboard and chalk, *or* wetboard and markers.
Goal: To identify what causes the student to become angry.
Follow-up: To discuss ways that anger can be worked through without an eruption having to occur.
Setting: One-on-one session or group session.



Holloway says that students should identify the factors that build up and cause them to erupt in angry outbursts. Recognizing some of these factors may help them understand when they are becoming angry.

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[40] From *Reaching out to children with FAS/FAE* by D. Davis. Reprinted with permission.

[41] From *Reaching out to children with FAS/FAE* by D. Davis. Reprinted with permission.

Help students, teachers and parents recognize that anger is a secondary emotion. It is a defence against feelings they would rather not experience, such as hurt, guilt, confusion, embarrassment, anxiety, humiliation, fear and sadness.[42] Anger functions to protect and defend. Identifying the real issues helps defuse anger. It is important to remember that it can take 90 minutes to dissipate the physical symptoms of anger. Allow students sufficient time to calm down before discussing consequences and developing therapeutic rapport.

Strategies to Enhance Psychological Development

Strategies to Enhance Self-esteem

Self-esteem, self-control and problem-solving mastery are best achieved when students feel they are in safe, secure, predictable and stable environments where expectations and boundaries are clearly defined. Students with FAS/PPAE require intervention strategies in this type of nurturing environment to help counteract prenatal risk factors and stressful experiences.

A Teacher's Guide to Cooperative Discipline is a resource which assists in identifying the goal of a particular misbehaviour. It provides specific intervention techniques to use at the moment of the misbehaviour. The resource looks beyond the teacher-student interaction brought about by the misbehaviour and suggests practical ways to create future positive interactions that build student self-esteem. *A Teacher's Guide to Cooperative Discipline*[43] is based on the following three concepts of behaviour.

1. Students choose their behaviour. Students' decisions about how to behave can be influenced. The teacher needs to know how to respond to students so that they want to choose appropriate behaviours and comply with rules.

2. The ultimate goal of student behaviour is to fulfill the need to belong. To experience a strong sense of belonging in school, students need to:
   - feel *capable* of completing tasks in a manner that meets the standards of the school
   - believe they can *connect* successfully with teachers and classmates
   - know they *contribute* in a significant way to the group.

   If students are unable to be capable, connect or contribute by behaving appropriately, they may try to achieve their goal of belonging by misbehaving.

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[42] From *Dynamics of anger: managing angry and aggressive youth* by S. Holloway of the Oldring Consulting Group. Reprinted with permission.

[43] From *A Teacher's guide to cooperative discipline: how to manage your classroom and promote self-esteem* by L. Albert. Adapted with permission.

3. When students choose misbehaviour over positive behaviour, what they want usually corresponds to one of these four goals:
   - attention
   - power, to be the boss of themselves, the teacher, sometimes the whole class
   - revenge, to lash out to get even for real or imagined hurts
   - avoidance of failure.

Self-esteem stems from feeling valued. Finding that "island of competency" and offering ways for students to contribute, builds self-esteem. Most students thrive on feeling needed and enjoy doing a job that is important and useful. Giving students responsibilities at school encourages responsible behaviour and improves self-esteem. *The Teacher's Encyclopedia of Behavior Management*[44] by Sprick & Howard provides specific ideas for jobs for students within the classroom and school. Children should be assigned jobs and responsibilities at home, as well, to foster a sense of belonging. It is important to do something and be someone in the eyes of others. Students with FAS/PPAE are at risk of becoming objects of pity. Students are more likely to receive respect if they assume valued roles. Give students valued roles through involvement in student body organizations, sports, serving as office and teaching assistants, utilizing existing expertise.

To help foster self-esteem, students with FAS/PPAE need teachers who:[45]

- recognize the importance of students making decisions for themselves
- acknowledge that students' behaviours, feelings and experiences are open to mutual discussion
- recognize that students become sensitive and aware of the needs and feelings of others only by having their own needs repeatedly met
- accept that students have negative and positive feelings
- recognize that giving students permission to express feelings leads to an increased ability to distinguish between wishes and fantasies, and reality
- recognize that verbal expression allows students to integrate past and present events into a total experience
- immediately acknowledge what students appear to be communicating when responding to behaviours

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[44] From *The Teacher's encyclopedia of behavior management: 100 problems/500 plans* by R. S. Sprick & L. M. Howard. Reproduced with permission.

[45] From *Today's challenge: teaching strategies for working with young children at risk due to prenatal substance exposure* by Los Angeles Unified School District. Reprinted with permission.

- demonstrate sensitivity to the particular meaning different stressors have for individual students.

Students need a sense of ownership and responsibility for their experiences. It is important to students' success and self-esteem that they feel they have a personal vested interest in their activities. Students are likely to assume increased ownership and responsibility if they feel they have freedom to make mistakes. Fear of mistakes can cause feelings of "learned helplessness" — the feeling that regardless of what they do, they cannot bring about positive change. Teach students to use mistakes wisely. Mistakes have causes and indicate temporary unreadiness. Taylor (1980, pp. 83–85), in *The Hyperactive Child and the Family: The Complete What-to-Do Handbook*, says that mistakes are sometimes laughable, accidental, proof of effort, incompletions not failures, unfortunate but not catastrophic, and profitable.

Students' sense of ownership and responsibility is enhanced when they are provided with opportunities to make choices. Anything can be shaped into a choice; anything can be a decision. Real choices, appropriate to students' ages, permit them to experiment, make mistakes and learn in non-threatening situations. Freedom to choose and assume responsibility for these choices gradually expands the physical, social, emotional and intellectual growth of students and promotes self-esteem, problem-solving skills and the development of moral values.[46]

Students have more appropriate than inappropriate behaviours. The teachers' language and actions must reflect this balance. Students need positive reinforcement, shared fun, affection, acceptance and active listening. In order for students to feel positive about their learning environment and internalize feelings of self-worth, they require frequent reinforcement.

Frequent use of "but" statements has a negative impact on the development of students' self-esteem. Be cautious when using "but" statements. Be aware that most people hear and likely internalize what is said after the "but." When reviewing students' behaviours, deal with the positives. Any occurrence of inappropriate behaviour should be addressed in the context it occurs and not be redressed.

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[46] From *Today's challenge: teaching strategies for working with young children at risk due to prenatal substance exposure* by Los Angeles Unified School District. Reprinted with permission.

The Hope Foundation states that it is possible to enhance students' self-esteem if they feel a sense of hope for their futures. One strategy is to build hope kits. In the same way that students need concrete learning experiences in academic areas, they need concrete representations of successful experiences. Encourage them to keep samples of their work, pictures of themselves successfully participating in school and class experiences, and certificates, rewards and positive accolades from other students and teachers. Encourage them to search their personal treasure chests when they are feeling down. This also provides students with a tangible link if they move to another environment.[47]

The resource, *Classroom Rituals for At-risk Learners* by G. Phillips, contains many strategies particularly applicable to adolescent students with FAS/PPAE. Phillips suggests teachers create a vision of excellence — mental pictures in the minds of learners. Students picture themselves as enthusiastic and motivated learners, pursuing mastery of demanding and worthwhile tasks. Then, help students close the gap between "what if" and "what is." Hope must be instilled in students for improvement to be an attractive and reasonable pursuit.[48]

Additional strategies for enhancing self-esteem are included in *Teaching Students with Learning Disabilities*. See annotation on page FAS.54.

Children and their families are best served when all interventions by professionals are provided in a co-ordinated manner. Time must be allotted for those involved to come together to develop a comprehensive individualized program plan to meet the special needs of the student and family. The home is an essential partner in education. Facilitating parental/caregiver goals helps establish a close working relationship between home and school. Intervention strategies that strengthen the positive interaction between child and family, increase parental confidence and competency. Parents must be invited to play an integral part in the development of students' individualized program plans.

A loving, structured family setting with clear guidelines and clear communication is optimal. People who are calm and low-keyed, secure with themselves, and who live stable and predictable lives have the highest success.[49]

C. T. Giunta & A. P. Streissguth

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[47] From *Hope foundation* by R. F. J. Jevne & The Hope Foundation of Alberta. Reprinted with permission.

[48] From *Classroom rituals for at-risk learners* by G. L. Phillips. Reprinted with permission.

[49] From "Patients with fetal alcohol syndrome and their caretakers" by C. T. Giunta & A. P. Streissguth. Reprinted with permission.

When developing a relationship and open lines of communication with the parent/caregiver:

- identify parental goals for their children
- identify parental concerns and assess family needs
- observe and discuss the parent/child relationship
- identify current interventions used by the parent
- facilitate referral to other agencies as needed
- encourage participation in parent education classes.

Some of these children may challenge even the most experienced parents. Specialized parenting courses such as those dealing with the parenting of difficult children may be of assistance.

Each family is unique. In order to approach the child and family history with professionalism and respect for confidentiality:

- discuss and model the importance of predictability and organization by developing transition plans
- establish regular patterns of communication with the home
- anticipate and integrate events at home and school.

When it is suspected that a student may be demonstrating characteristics of fetal alcohol syndrome or possible prenatal alcohol-related effects:

- remember that it is a medical diagnosis
- ensure all necessary academic and psychological testing is completed to assist in providing a complete picture of the needs of the student
- review the list of physical, educational and behavioural characteristics provided
- determine which characteristics the student is presenting
- outline, preferably in writing, the presenting concerns
- meet with parents, using a co-ordinated team approach
- provide the parents with a list of the concerns and suggest further exploration of these concerns with medical personnel
- reiterate to parents that additional information is being sought to assist in understanding and supporting the learning needs of their child.

When providing help and support to parents of students with FAS/PPAE, several factors must be considered. The student with FAS/PPAE may suffer not only from central nervous system problems caused by prenatal alcohol exposure, but also from the postnatal environment. Disruptions resulting from the biological parents' lifestyles may continue throughout students' lives. May states that because of the unstable lifestyles of many mothers of children with FAS/PPAE, 70 per cent are in foster or adoptive placement. A high

percentage of mothers suffer death from alcohol-related causes within a decade after the birth of their first child with FAS/PPAE.[50] Parents addicted to alcohol typically have a primary commitment to the substance they are abusing, not to their children. Substance abuse undermines the normal patterns of interactions between parent and child, and alters conventional priorities of parents.

Parents of children at risk may themselves have past or present experiences which compromise their abilities to effectively parent their children. Factors including poverty, depression, a history of child abuse and neglect, family instability and violence, psychiatric problems and drug abuse, must be taken into consideration when addressing the needs of these children.

These children frequently develop within unstable family environments whether they remain with their biological parents or enter a series of different care situations. Children who reside in foster homes or are placed with extended family members are particularly vulnerable to the consequences of separation, loss and poor attachments.

Adoptive parents receiving children may not be informed of the possibilities of prenatal exposure to alcohol. Parents may be unaware of possible damages caused by alcohol. Often it is not until children start school and their learning disabilities and inherent socially dysfunctional traits become obvious, that parents may suspect difficulties. Parents may require assistance in understanding the needs of their children and in adapting their expectations for the present and future.

Streissguth, as cited in Huebert & Raftis, suggests that parents may require assistance in one or more of the following areas:

- learning about the signs, symptoms, medical, social and behavioural consequences of FAS/PPAE
- understanding that behavioural and developmental disturbances are the result of brain damage
- setting realistic goals and expectations for their children and themselves
- focusing on their children's strengths, talents and accomplishments
- coordinating health and social services
- advocating appropriate school placements

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[50] From *FAS among North American Indians: overview of scientific literature* by P. A. May. Reprinted with permission.

- accessing respite care, long-term planning for financial and custody issues
- finding parent support groups and/or counselling.[51]

Strategies for Co-ordinating Services with Other Agencies

Although FAS/PPAE are conditions with lifelong consequences, the future is not hopeless. Capron says that children with FAS/PPAE need special educational and community services aimed at equipping them with the skills to cope with life and live as independently as possible.[52] Teachers can maximize the potential of students by beginning early to plan and implement appropriate education programs, manage challenging behaviours effectively, improve support services for adolescents and adults, and provide better education and support for families. The multiple needs of students with FAS/PPAE require multiple fronts of intervention and intense interagency co-operation.

Meeting the needs of students with FAS/PPAE requires a co-ordinated effort. No single person or agency can do it alone. The issues need to be confronted at the classroom, school and district level in close partnership with the home and community. Efforts need to be two-fold — supporting individuals with FAS/PPAE and educating the community about the preventative nature of these disabilities. The FAS Provincial Coordinating Committee for Alberta was formed to maximize the use of available resources to ensure greater effectiveness of services for those affected by fetal alcohol syndrome and other possible prenatal alcohol-related effects through increased collaboration of professionals. The committee has developed a community resource list — a list of people, groups and agencies offering services related to fetal alcohol syndrome and other possible prenatal alcohol-related effects. It provides a starting place for parents, caregivers or helping professionals looking for services related to prenatal alcohol-related effects. The resource list is updated on an annual basis. See page FAS.51 for annotation.

Davis states that educators should:
- be informed about the effects of FAS/PPAE and provide information to other agencies as required
- develop a referral system for students identified as having possible alcohol or drug-related effects
- work collaboratively with parents to identify, plan and deliver appropriate programming and services
- establish education programs to inform the community of the dangers of alcohol consumption by expectant mothers

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[51] From *Fetal alcohol syndrome and other alcohol-related birth defects* by K. Huebert & C. Raftis. Reprinted with permission.

[52] From "Fetal alcohol and felony" by A. Morgan Capron. Reproduced with permission.

- network with external agencies to provide active school education programs to faculty, parents and students
- model genuine caring, concern and high expectations for students with FAS/PPAE
- collaboratively develop transition plans with specified supports and services necessary to enable students to be successful.[53]

[53] From *Reaching out to children with FAS/FAE* by D. Davis. Reprinted with permission.

Section III

Other Teaching Resources

This listing is not to be construed as an explicit or implicit departmental approval for use of the resources listed. These titles are provided as a service only to assist school authorities to identify resources that contain potentially useful ideas. The responsibility to evaluate these resources prior to selection rests with the user, in accordance with any existing local policy.

Resources listed in this section can be ordered from the publishers. See Section IV, pages FAS.59–60, for addresses.

1–2–3 Magic: training your children to do what you want (1995) by Thomas W. Phelan. Glen Ellyn, IL: Child Management, Inc. ISBN 0–9633861–2–3 (book); ISBN 0–9633861–3–1 (video).

This book describes the 1–2–3 or counting method for managing the behaviour of students in ECS to Grade 8. It provides strategies to help teachers and parents reduce obnoxious and encourage good behaviours, respond to major/medium/minor behaviour offences, build self-esteem and improve active listening skills. A video is also available.

Born hooked: poisoned in the womb (1994) (new revised, second edition) by Gary E. McCuen. Ideas in Conflict. Hudson, WI: GEM/McCuen Publications, Inc. ISBN 0–86596–091–7.

Chapter 1 of this resource presents an overview of the economic and social cost of substance abuse in pregnancy, and the impact of drug abuse on the welfare system. It includes a fetal alcohol fact sheet and a list of 10 common misconceptions about fetal alcohol syndrome. Chapter 2 discusses points and counterpoints about fetal alcohol syndrome, including definitions of FAS and FAE. Chapter 3 discusses fetal neglect and social response. The last chapter deals with crime, pregnancy and drugs.

As part of the *Ideas in Conflict* series, the book presents opposing viewpoints and critical thinking exercises. Some cartoons are graphic. The subject matter is controversial and individual essays present their authors' biases. The perspectives and most legal information are from the United States.

Teachers could benefit from this resource which explores some of the complexities surrounding the topic of children who have disabilities as a result of their mothers' prenatal substance abuse. Teachers should critically examine the issues and essays presented as a number of differing viewpoints are discussed.

Children of prenatal substance abuse (1993) by Shirley N. Sparks. San Diego, CA: Singular Publishing Group. ISBN 1–56593–071–1.

This resource presents answers to questions that arise when working with students who were prenatally exposed to drugs.

The author provides a thorough description of the short- and long-term effects of prenatal exposure to cocaine and alcohol on cognitive and neuromotor development. Practical intervention strategies tailored to the specific needs of cocaine-exposed and/or alcohol-exposed students are presented in a straightforward manner. Emphasis is placed on early intervention with the family as the most effective treatment. In addition, clinicians and teachers learn about their roles in prevention, referrals to other service programs and sources for educational material.

Exceptions: a handbook of inclusion activities for teachers of students at grades 6–12 with mild disabilities (1994) by Deborah Murphy, Celia Meyers, Sylvia Olesen, Kathy McKean & Susan Custer. Longmont, CO: Sopris West. Available from the Learning Resources Distributing Centre.

This handbook is filled with techniques, practical tools and activities to help regular classroom teachers deal with students with mild disabilities. *Exceptions . . .* provides mainstreamed students with survival skills in four basic areas: reading, mathematics, language learning and study skills. It also provides adaptive techniques that enable teachers to modify regular instructional approaches and materials to accommodate students. It includes checklists, planning forms and a variety of adaptive techniques for modifying instruction.

Fantastic Antone succeeds! Experiences in educating children with fetal alcohol syndrome (1993) by Judith Kleinfield & Siobhan Wescott (eds.). Fairbanks, AK: University of Alaska Press. ISBN 0–912006–71–4.

This book is written for those who work with alcohol-affected students and their families. The stories describe what educators call the "wisdom of practice" — the lessons and inventions of experience. It also includes lists of resources, organizations to contact and descriptions of effective classroom practices for teachers.

Fetal alcohol syndrome and other alcohol-related birth defects by Kathy Huebert & Cindy Raftis (1996) (second edition). Edmonton, AB: Alberta Alcohol and Drug Abuse Commission. ISBN 0–7732–0854–2.

This resource is an update of the 1993 edition and helps counsellors and other professionals become familiar with the issues and facts surrounding fetal alcohol syndrome and other prenatal alcohol-related effects. The resource answers some common questions and issues about FAS:

- what are FAS, FAE and alcohol-related birth defects
- how is FAS identified
- what are the effects of prenatal alcohol exposure
- is there a safe level of drinking during pregnancy
- can a father cause or contribute to alcohol-related birth defects
- what is the incidence of FAS and other alcohol-related birth defects
- is there a concern about labelling
- what are some intervention strategies
- what are some prevention strategies?

Three information sheets based on the material in this resource are also available.

Fetal alcohol syndrome: community resource list (1997) by the FAS Provincial Coordinating Committee. Edmonton, AB: Alberta Alcohol and Drug Abuse Commission, FAS Provincial Coordinating Committee.

This resource lists people, groups and agencies offering services related to fetal alcohol syndrome and other possible prenatal alcohol-related effects. Although it is not exhaustive, it provides a starting point for parents, caregivers or helping professionals looking for services in six areas: health services, addiction services, educational support, social services, other community resources and information services.

Guide to education for students with special needs (1997) by Alberta Education. Edmonton, AB: Alberta Education. Available from the Special Education Branch.

This guide sets out Alberta Education's requirements and expectations for the development and delivery of programs for students with special needs.

Ideas for inclusion: the classroom teacher's guide to integrating students with severe disabilities (1996) by Anne M. Beninghof. Longmont, CO: Sopris West. ISBN 1-57035-003-5.

This resource provides classroom teachers with 50 practical, easy-to-implement strategies for successfully integrating students with moderate and severe disabilities. The strategy areas include:

- curriculum and grading modification
- classroom management
- working with peer tutors, parents and paraprofessionals
- facilitating friendships.

Each of the strategies includes some information related to integration, some background about the idea behind the strategy and specific suggestions on how to achieve that particular strategy. Additional resource suggestions are also provided for specific strategies.

Ideas for inclusion: the school administrator's guide (1995) by Anne M. Beninghof & Anne Louise T. Singer. Longmont, CO: Sopris West. ISBN 1-57035-042-6.

This guide offers solutions to the common obstacles faced by administrators as they work with staff to provide inclusive educational environments for students. Numerous strategies are provided in the areas of:

- leadership
- planning processes
- assessment
- curriculum and instruction
- student supports
- family and community
- business management
- personnel.

In each of these areas, there are methods for effecting changes in school culture and practices so that inclusion is successful. Within each area there are straightforward descriptions of specific strategies accompanied by charts and blank forms.

Interventions: collaborative planning for students at risk (1993–1997) by Randall S. Sprick, Marilyn Sprick & Mickey Garrison. Longmont, CO: Sopris West. ISBN 0–944584–95–0.

This comprehensive resource consists of two components to help educators plan and implement strategies for at-risk students. The procedural manual provides information on how to design and implement high-quality intervention plans. The 16 self-contained booklets contain proven interventions with step-by-step instructions for implementing, monitoring and fading a specific intervention. The intervention booklets include procedures, such as managing physically dangerous behaviour, managing severely disruptive behaviour, self-monitoring, self-control, training, restructuring, self-talk, academic assistance and managing stress. Twenty optional audiotapes are available.

Partners during changing times: an information booklet for parents of children with special needs (1996) by Alberta Education. Edmonton, AB: Alberta Education. Available from the Special Education Branch.

This information booklet for parents of children with special needs provides a general overview of how parents can be involved in the education of their children. It outlines the roles and responsibilities of parents, the school's rights and responsibilities, relevant legal parameters, and funding sources to support the delivery of special education programs and services.

Programming for students with special needs (1996) by Alberta Education. Edmonton, AB: Alberta Education. Available from the Learning Resources Distributing Centre.

Book 1: *Teaching for student differences* — Highlights strategies for differentiating instruction within the regular classroom for students who may be experiencing learning or behavioural difficulties, or who may be gifted and talented. It also describes a process for modifying the regular program and includes forms to assist in teacher planning.

Book 2: *Essential and supportive skills for students with developmental disabilities* — Includes developmental checklists for communication skills, gross and fine motor skills, as well as charts and checklists which provide a continuum of life skills by domain (domestic and family life, personal and social development, leisure/recreation/arts, citizenship and community involvement, career development). It replaces the Alberta Education curricula (1983) for educable mentally handicapped, trainable mentally handicapped and dependent mentally handicapped students.

Book 3: *Individualized program plans* — This resource describes a process for IPP development and includes strategies for involving parents. It provides information on writing long-term goals and short-term objectives. Forms and checklists are included to assist in planning. Transition planning is also addressed, along with case studies and samples of completed IPPs.

Book 4: *Teaching students who are deaf or hard of hearing* — Includes information on the nature of hearing loss, various communication systems, program planning and teaching strategies, and a section on amplification and educational technologies which includes hints for troubleshooting hearing aids and FM systems.

Book 5: *Teaching students with visual impairments* — This resource offers basic information to help provide successful school experiences for students who are blind or visually impaired. The information in this book addresses:

- the nature of visual impairment
- educational implications
- specific needs
- instructional strategies
- the importance of orientation and mobility instruction
- the use of technology.

Book 6: *Teaching students with learning disabilities* — This resource provides practical strategies for regular classroom and special education teachers. Section I discusses the conceptual model and applications of the domain model. Section II includes identification and program planning, addressing early identification, assessment, learning styles and long-range planning. Section III contains practical strategies within specific domains including metacognitive, information processing, communication, academic and social/adaptive domains. Section IV addresses other learning difficulties including attention-deficit/hyperactivity disorder and fetal alcohol syndrome/possible prenatal alcohol-related effects. The appendices contain lists of annotated resources, test inventories, support network contacts and blackline masters.

Reaching out to children with FAS/FAE: a handbook for teachers, counselors, and parents who work with children affected by fetal alcohol syndrome and fetal alcohol effects (1994) by Diane Davis. West Nyack, NY: The Center for Applied Research in Education.
ISBN 0–87628–857–3.

This resource offers information and techniques which can be expanded or modified to fit the needs of teachers and families involved with children with FAS/FAE. Section I includes identification and diagnosis, causes, parenting issues and teaching issues. Section II deals with specific, concrete techniques for working with children, adolescents and adults with FAS/FAE. Some techniques include dealing with anger, ways of releasing energy, building self-esteem, behaviour modification techniques, basic living skills, social skills and finding jobs. An extensive resource list in Section III includes recommended teaching and training materials for helping students with FAS/FAE.

Skills for school success (Books 3, 4, 5 and 6) (1991) by Anita Archer & Mary Gleason. North Billerica, MA: Curriculum Associates, Inc.

This four-level series of books integrates positive classroom behaviours and study skills strategies into all subject areas for students in Grades 3–6. Students learn how to:

- organize notebooks
- maintain calendars of assignments
- complete well-organized papers
- follow directions
- take notes from lectures and written material
- study for and take tests
- use a table of contents, glossary and index
- develop skills in reading and interpreting graphs and tables
- alphabetize and interpret dictionary and encyclopedia entries.

The teacher guides offer introductory lessons and review activities with over 50 reproducible pages of checklists, reference sheets, parent letters, review games, award certificates and class posters. The consumable student books include work pages for teacher-directed lessons.

SMARTS: studying, memorizing, active listening, reviewing, test-taking, and survival skills — a study skills resource guide (1995) by Susan Custer, Kathy McKean, Celia Meyers, Deborah Murphy, Sylvia Olesen & Susan Parker. Longmont, CO: Sopris West. ISBN 1–57035–045–0.

This resource contains a collection of activities and techniques designed to help students having difficulty with:

- study skills
- listening
- following directions
- organizational skills
- using textbooks effectively
- note-taking
- building vocabulary
- memory and review
- taking tests.

The recommended strategies can be applied across curricular areas and are appropriate for both elementary and secondary levels. This resource advocates setting instructional goals required for success of individual students, and teaching those skills over the course of the year in a systematic, sequential manner.

Strategies and tactics for effective instruction (1993) by Bob Algozzine & Jim Ysseldyke. Longmont, CO: Sopris West. ISBN 0–944584–41–1.

Strategies and Tactics for Effective Instruction, an instructional improvement system to be used with difficult-to-teach students, is based on 10 critical instructional factors. Suggested teaching activities based on these factors, are divided into four components — planning, managing, delivering and evaluating instruction. Each of the components contains several sections of teaching principles with related teaching strategies and specific teaching tactics.

The Teacher's encyclopedia of behavior management: 100 problems/500 plans (1995) by Randall S. Sprick & Lisa M. Howard. Longmont, CO: Sopris West. ISBN 1–57035–031–0.

This reference book contains approximately 100 common classroom problems arranged alphabetically by title. Each problem includes general considerations, model plans, and suggested steps for developing and implementing a plan. The appendices deal with three topics: reinforcing appropriate behaviour, assigning responsibilities or jobs and responding to inappropriate behaviour. An index includes multiple descriptive titles for each problem.

A Teacher's guide to cooperative discipline: how to manage your classroom and promote self-esteem (1989) by Linda Albert. Circle Pines, MN: American Guidance Service, Inc. ISBN 0–88671–362–5.

A Teacher's Guide to Cooperative Discipline shows teachers how to work with students to make the classroom a pleasant place in which to teach and learn. The sections outline methods for dealing with attention-seeking, power and revenge, and avoidance-of-failure behaviours. Methods for building self-esteem are also included. The appendices include a review chart of the four goals of misbehaviour, a summary chart of interventions for specific behaviours and a chart outlining the building blocks of self-esteem.

The Tough kid book: practical classroom management strategies (1993) by Ginger Rhode, William R. Jenson & H. Kenton Reavis. Longmont, CO: Sopris West. ISBN 0–944584–54–3.

The Tough Kid Book gives teachers practical techniques to be used with students who are difficult. These techniques can be implemented inexpensively and quickly. The book is divided into four chapters. The first identifies what a "tough kid" looks like. It covers the realistic assessment of students who are difficult and proactive methods of setting up a classroom. The second chapter focuses on interventions to reward students for coming to school, following classroom procedures and performing academically. The third chapter reviews realistic techniques to help teachers stop problem behaviours. The last chapter includes more advanced techniques, including social skills training materials, instructional techniques, programs to improve on-task behaviour and parent training information.

The Tough kid social skills book (1995) by Susan M. Sheridan. Longmont, CO: Sopris West. ISBN 1–57035–051–5.

This book focuses on specific methods to assess and teach students who display deficits in social skills. The chapters:

- present an overview of the social problems of "tough kids"
- describe a multi-gated assessment procedure
- describe levels of intervention
- include specific tools and tactics for structuring social skills group interventions
- present training session outlines.

The book includes practical strategies to assess social skills and procedures for leading social skills groups. This book contains student handout and transparency masters for teachers to reproduce for use in the classroom.

The Tough kid tool box (1994) by William R. Jenson, Ginger Rhode & H. Kenton Reavis. Longmont, CO: Sopris West. ISBN 1–57035–000–0.

This resource complements and supplements *The Tough Kid Book* by providing in-depth explanations and techniques that teachers can use in everyday situations. The sections include:

- mystery motivators (incentive systems designed to deliver random rewards for appropriate behaviours)
- home note program (informational note that goes from classroom to home, and back to school)
- self-monitoring program (a process in which students observe and collect data on their own behaviours)
- behaviour contracting (involves placing contingencies for reinforcement into a written document which is agreed to and signed by all parties)
- tracking procedures (monitoring students' behaviours and academic performance)
- unique reinforcers (positive reinforcement is given to students immediately after desired behaviours occur)
- general interventions (variety of interventions with detailed instructions for use).

Each section begins with a definition of the intervention, a specific description of the intervention and complete steps for implementing the technique. Trouble-shooting suggestions and "making it even better" suggestions are offered as well. The purchasing teacher has permission to reproduce the tools for use in the classroom.

Section IV

Publishers' Addresses

Alberta Alcohol and Drug Abuse Commission
6th Floor, 10909 Jasper Ave.
Edmonton, AB T5J 3M9
Telephone: (403) 427–1953

Alberta Alcohol and Drug Abuse Commission
FAS Provincial Coordinating Committee
200, 10909 Jasper Ave.
Edmonton, AB T5J 3M9
Telephone: (403) 427–7319
Toll free: 1–800–280–9616

American Guidance Service, Inc.
Circle Pines, MN USA
Canadian Distributor:
Psycan
P.O. Box 290, Station V
Toronto, ON M6R 3A5
Telephone: 1–800–263–3558

Center for Applied Research in Education, The
West Nyack, NY USA
Canadian Distributor:
Prentice-Hall Ginn
1870 Birchmount Rd.
Scarborough, ON M1P 2J7
Telephone: (416) 293–3621

Child Management, Inc.
800 Roosevelt Rd.
Glen Ellyn, IL 60137 USA
Telephone: (630) 790–9600

Curriculum Associates, Inc.
North Billerica, MA USA
Canadian Distributor:
Virginia Wood
1408 Crescent Rd. N.W.
Calgary, AB T2M 4B1
Telephone: (403) 282–2441

GEM/McCuen Publications, Inc.
Hudson, WI USA
Canadian Distributor:
C. Kirkness Press
P.O. Box 56510
93B Woodbridge Ave.
Woodbridge, ON L4L 8V3
Telephone: (905) 851–4660

Learning Resources Distributing Centre (LRDC)
12360 – 142 St. N.W.
Edmonton, AB T5L 4X9
Telephone: (403) 427–5775
On-line ordering: http://ednet.edc.gov.ab.ca/lrdc

Singular Publishing Group
San Diego, CA USA
Canadian Distributor:
Brijan Resources Ltd. (Jan Avis)
822 Burton Loop
Edmonton, AB T6R 2J2
Telephone: 1–800–567–1147
In Edmonton: (403) 430–8305

Sopris West
Longmont, CO USA
Canadian Distributor:
Teachers' Book Depository
18004 – 116 Ave. N.W.
Edmonton, AB T5S 1L5
Telephone: 1–800–661–1959
In Edmonton: (403) 453–7092

Special Education Branch
Alberta Education
10th Floor, East Devonian Building
11160 Jasper Ave.
Edmonton, AB T5K 0L2
Telephone: (403) 422–6326

University of Alaska Press
1st Floor, Gruening Building
University of Alaska, Fairbanks
P.O. Box 756240
Fairbanks, AK 99775–6240 USA
Telephone: (907) 474–6389

Section V

Footnote References

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[2] *Fetal alcohol syndrome: diagnosis, epidemiology, prevention, and treatment* (pp. 3–5), by K. R. Stratton, C. J. Howe & F. C. Battaglia, 1996, Washington, DC: National Academy Press. Reprinted with permission from *Fetal alcohol syndrome: diagnosis, epidemiology, prevention, and treatment*. Copyright 1996 by the National Academy of Sciences. Courtesy of the National Academy Press, Washington, D.C.

[3] *A Manual on adolescents and adults with fetal alcohol syndrome with special reference to American Indians* (p. 5), by A. Pytkowicz Streissguth, R. A. LaDue & S. P. Randels, 1986, U.S. Department of Health and Human Services. Material reprinted with permission of the Indian Health Service, U.S. Department of Health and Human Services.

[4] *A Manual on adolescents and adults with fetal alcohol syndrome with special reference to American Indians* (p. 5), by A. Pytkowicz Streissguth, R. A. LaDue & S. P. Randels, 1986, U.S. Department of Health and Human Services. Material reprinted with permission of the Indian Health Service, U.S. Department of Health and Human Services.

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[6] *Fetal alcohol syndrome and other alcohol-related birth defects* (pp. 3–4), by K. Huebert & C. Raftis, 1996, second edition, Edmonton, AB: Alberta Alcohol and Drug Abuse Commission. Permission to reprint (or adapt) granted by the Alberta Alcohol and Drug Abuse Commission.

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[8] *An Overview of fetal alcohol syndrome and fetal alcohol effects* (p. 38), by C. A. Schroeder, 1996, Laramie, WY: Creative Consultants, Inc. Reprinted with permission of Dr. Cheryl A. Schroeder, Creative Consultants, Inc.

[9] *Fetal alcohol syndrome and other alcohol-related birth defects* (pp. 25–27), by K. Huebert & C. Raftis, 1996, second edition, Edmonton, AB: Alberta Alcohol and Drug Abuse Commission. Permission to reprint (or adapt) granted by the Alberta Alcohol and Drug Abuse Commission.

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[11] *Today's challenge: teaching strategies for working with young children at risk due to prenatal substance exposure* (p. 2), by Los Angeles Unified School District, 1990, Los Angeles, CA: Los Angeles Unified School District. Reprinted with permission.

[12] *Reaching out to children with FAS/FAE: a handbook for teachers, counselors, and parents who work with children affected by fetal alcohol syndrome and fetal alcohol effects* (pp. 150–153), by D. Davis, 1994, West Nyack, NY: The Center for Applied Research in Education. From *Reaching out to children with FAS/FAE* by Diane Davis. Copyright © 1994. Reprinted with permission of The Center for Applied Research in Education/Prentice Hall.

[13] *Today's challenge: teaching strategies for working with young children at risk due to prenatal substance exposure* (pp. 7–16), by Los Angeles Unified School District, 1990, Los Angeles, CA: Los Angeles Unified School District. Reprinted with permission.

[14] *A Manual on adolescents and adults with fetal alcohol syndrome with special reference to American Indians* (pp. 10–12), by A. Pytkowicz Streissguth, R. A. LaDue & S. P. Randels, 1986, U.S. Department of Health and Human Services. Material reprinted with permission of the Indian Health Service, U.S. Department of Health and Human Services.

[15] *First things first: to live, to love, to learn, to leave a legacy* (pp. 150–151), by S. R. Covey, A. R. Merrill & R. R. Merrill, 1995, New York, NY: Fireside. ©1994 Franklin Covey. Used with permission.

[16] *Teaching students who are deaf or hard of hearing* (p. DHH.63), by Alberta Education, 1996, Edmonton, AB: Alberta Education, Special Education Branch. Reprinted with permission.

[17] *Planning student programs: health, grades 1 to 9* (Section II, p. 6), by Edmonton Public Schools, 1993, Edmonton, AB: Edmonton Public Schools. Permission to use is granted by Edmonton Public Schools.

[18] "Meeting functional curriculum needs in middle school general education classrooms," by S. Field, B. LeRoy & S. Rivera, 1994, *Teaching Exceptional Children*, 26(2), p. 42. Reprinted with permission.

[19] "Fetal alcohol and felony," by A. Morgan Capron, May–June, 1992, *Hastings Center Report*, p. 29. Reproduced by permission. © The Hastings Center.

[20] *A Manual on adolescents and adults with fetal alcohol syndrome with special reference to American Indians* (p. 36), by A. Pytkowicz Streissguth, R. A. LaDue & S. P. Randels, 1986, U.S. Department of Health and Human Services. Material reprinted with permission of the Indian Health Service, U.S. Department of Health and Human Services.

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[22] "Solving social-behavioral problems through the use of visually supported communication," by L. Q. Hodgdon, 1995, in K. A. Quill (ed.), *Teaching children with autism* (p. 282). New York, NY: Delmar Publications. Used with permission.

[23] *The Original social story book* (p. 1 – Social Story Kit), by C. Gray (ed.), 1993, Jenison, MI: Jenison Public Schools. Reprinted with permission.

[24] *Just say know: understanding and reducing the risk of sexual victimization of people with developmental disabilities* (pp. 50–61), by D. Hingsburger, 1995, Eastman, PQ: Diverse City Press. Reprinted with permission.

[25] *An Overview of fetal alcohol syndrome and fetal alcohol effects* (pp. 40–41), by C. A. Schroeder, 1996, Laramie, WY: Creative Consultants, Inc. Reprinted with permission of Dr. Cheryl A. Schroeder, Creative Consultants, Inc.

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[27] *The F.A.T. City learning disability workshop: discussion guide* (p. 4), by R. D. Lavoie, 1990, Washington, DC: Greater Washington Educational Telecommunications Association, Inc. Teacher's Guide to *How difficult can this be?: the F.A.T. city workshop*. © Greater Washington Educational Telecommunications Association, Inc., 1990. To purchase the complete guide or video, contact WETA Video, P.O. Box 2626, Washington, DC, 20013; telephone (703) 998–3293.

[28] *Today's challenge: teaching strategies for working with young children at risk due to prenatal substance exposure* (p. 3), by Los Angeles Unified School District, 1990, Los Angeles, CA: Los Angeles Unified School District. Reprinted with permission.

[29] *The Tough kid book: practical classroom management strategies* (pp. 20, 22), by G. Rhode, W. R. Jenson & H. K. Reavis, 1992, Longmont, CO: Sopris West. Reproduced with permission from Rhode, G., Jenson, W. R. & Reavis, H. K. (1992). *The Tough kid book: practical classroom management strategies*. Longmont, CO: Sopris West.

[30] *1–2–3 Magic: training your children to do what you want* (p. 16), by T. W. Phelan, 1995, Glen Ellyn, IL: Child Management, Inc. Reprinted with permission.

[31] *The Tough kid book: practical classroom management strategies* (pp. 64–65), by G. Rhode, W. R. Jenson & H. K. Reavis, 1992, Longmont, CO: Sopris West. Reproduced with permission from Rhode, G., Jenson, W. R. & Reavis, H. K. (1992). *The Tough kid book: practical classroom management strategies*. Longmont, CO: Sopris West.

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Section VI

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